

**GENDER ROLES IN TEXTBOOKS AS A FUNCTION OF HIDDEN CURRICULUM
IN TANZANIA PRIMARY SCHOOLS**

By

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SUMMARY

One gender related issue addressed in the Education and Training Policy of Tanzania is the thrust to ensure that gender equality prevails in the schooling process. One way of implementing gender equality is the elimination of gender role stereotyping in school textbooks. Tanzania scholarship on gender shows that there is knowledge gap on how gender roles are depicted in textbooks. Furthermore there are no adequate mechanisms to ensure the production of textbooks that are free from gender stereotyping.

Based on a Liberal Feminist Framework, the study using content analysis method has examined the extent to which gender roles had been portrayed in the 40 textbooks in the six subjects taught in Tanzanian government primary schools. Further, employing interviews, the study examined mechanisms instituted by the Ministry of Education and Culture (MOEC) and Publishers to ensure that the production of textbooks is not gender biased.

The findings of this study include the following:

- Female compared to male characters were being under represented in:
 - Frequency of appearance and power related aspects such as leadership, ownership of property and association with technology,
 - leisure and sports activities;
- The depiction of reproductive and productive roles is biased into traditional femininity and masculinity;
- Gender biased language is minimal; and
- Personality traits are differentiated between traditional masculinity and femininity groupings; and
- The mechanisms to eliminate gender stereotyping in producing textbooks are inadequate as the emphasis is on producing textbooks that matched with the official curriculum.

The Hidden Curriculum Theory and the corresponding Social Learning Theory instruct that gender biased hidden messages in textbooks are acquired by students through socialization. Gender biased hidden messages have the negative impact of creating a society that disrespects gender equality. While both boy and girl learners are negatively affected by these messages, girls are more affected in not building positive self-esteem, have less career options and few role models.

The study concludes with recommendations to stakeholders in textbooks production to produce non-sexist textbooks. The recommendations are intended to generate awareness on the importance of producing textbooks that are non-sexist. This is coupled with recommendations for further studies.

KEY TERMS: Gender, Gender roles, Gender stereotyping, Sexism, Hidden curriculum, Socialization, Content analysis, Feminism, Liberal feminism

DECLARATION

Student number: 3200-679-9

I declare that:

'Gender Roles in Textbooks as a Function of Hidden Curriculum in Tanzania Primary Schools'

is my own work and that all the sources that have been used or quoted have been indicated and acknowledged by means of complete references.

.....
SIGNATURE
Sydney G.V Mkuchu

.....
DATE

ACRONYMS

APA	-	American Psychological Association
BSRI	-	Bem Sex Role Inventory
DUP	-	Dar es Salaam University Press
FAWE	-	Forum for African Women Educationists
FLE	-	Family Life Education
HIV/AIDS	-	Human Immune deficiency Virus/Acquired Immune Deficiency Syndrome
KWWN	-	Korea Working Women Network
LFS	-	Labour Force Survey
MOEC	-	Ministry of Education and Culture
NOW	-	National Organization of Women
OAU	-	Organization of African Unity
PPP	-	Pilot Publishing Project
TANU	-	Tanganyika African National Union
TIE	-	Tanzania Institute of Education
TPH	-	Tanzania Publishing House
TV	-	Television
TGNP	-	Tanzania Gender Networking Programme
UNO	-	United Nations Organization
TTC	-	Teachers Training College
UNESCO	-	United Nations Educational Scientific and Cultural Organization
UNFPA	-	United Nations Fund for Population

URT	-	United Republic of Tanzania
USA	-	United States of America
ETPT	-	Education and Training Policy of Tanzania
CEDAW	-	Convention of Elimination of all forms of Discrimination Against Women
UNICEF	-	United Nations Children Emergency Fund
PATA	-	Publishing Association of Tanzania
CBP	-	Children's Book Project
APNET	-	African Publishers Network
BMU	-	Book Management Unit
EMAC	-	Educational Materials Assessment Committee
SADC	-	Southern African Development Co-operation
MCDWAC	-	Ministry of Community Development, Women Affairs and Children
CA	-	Content Analysis
AAU	-	Association of African Universities
ESR	-	Education for Self Reliance
LHRC:	-	Legal and Human Rights Centre
n.d	-	no date
ICT	-	Information and Communication Technology
AVU	-	African Virtual University

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CHAPTER ONE

INTRODUCTION

1.1 Background to the problem

For quite some time in Tanzania we have witnessed some pressure from civic organizations, government ministries and human rights activists committed towards gender equality, demanding an education system that adheres to gender equality. They have called upon the government to introduce an education system in which females and males would be treated and encouraged to achieve their full potential in the schooling process (Mbilinyi et al 1991, Ministry of Community Development, Women Affairs and Children-MCDWAC 1995 and Tanzania Gender Networking Programme-TGNP 1993). Besides changes that have occurred in the domestic and international sphere, these changes have raised the concern in Tanzania for the introduction of an educational policy that takes into consideration an education system that addresses not only issues of access but also gender equity in the schooling process. It is within these domestic and international conditions that educational human rights activists in Tanzania have been pressing for improved women conditions in access and equity in the schooling system.

Since Tanzania became independent in 1961, she is committed to the principle of human equality. This principle is reiterated in the Constitution of the United Republic of Tanzania of 1977. Also Tanzania being a member of the United Nations (UN) is obliged to adhere to the UN Charter, the UN Universal Declaration of Human Rights of 1948 and the subsequent UN International Human Rights instruments. Moreover, her participation in different UN conferences concerned with gender equality, binds Tanzania to implement these/their deliberations. Examples of such forums are the four World Women Conferences held in Mexico (1975), Copenhagen (1980), Nairobi (1985) and Beijing (1995). Among the issues, addressed in these conferences have been those of gender equality in relation to gender stereotyping in the education sector. There have been calls to ensure that sexism and gender stereotyping in educational materials are eliminated.

However, despite the long term commitment of Tanzania to the principle of human equality and the international pressure for the same, it was only in February 1995 that the Government of Tanzania came up with the *Education and Training Policy* that addressed, among other issues, gender equity in education and training.

1.1.1 The UN and gender stereotyping in education

In 1979, the UN General Assembly adopted the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW). Article 10 of Part III of the CEDAW stresses the importance of eliminating discrimination against women as a means of maintaining the rights in education for females and males. As regards textbooks, the convention states that:

Any stereotyping concept of the roles of men and women at all levels and in all forms of education...should be eliminated... in particular by revision of textbooks and school programmes, and the adoption of teaching methods. (UN 1979:7).

According to Fredrich Ebert Stiftung (FES) Political Handbook and NGO Calendar of 2000, Tanzania signed CEDAW on 17th July 1984 and ratified it on 20th August 1985.

Despite the CEDAW condemnation of textbooks that are stereotypical on gender roles, reports to the UN World Conferences on Women continue to show that the problem still exists. For example, in the 3rd UN World Conference on Women held in Nairobi (1985), a recommendation was passed requiring governments to take all necessary measures to eliminate stereotypes on the basis of sex from educational materials at all levels. Ten years later in 1995 when the fourth UN World Conference on Women was held in Beijing, the problem of gender stereotyping in textbooks had not been solved. This time, governments were again called upon *"to develop textbooks that are... free of gender based stereotyping"* (UN 1995:52).

1.1.2 UN organizations and textbooks

Most UN organizations such as UNESCO, UNFPA, and UNICEF have shown much concern on gender equality in different spheres of development including education. They have also addressed the undesirability of the production of textbooks that are gender biased. Some of these organizations have laid down strategies that are designed to eliminate gender prejudices in textbooks.

With the objective of supporting efforts to counter sexism in books, UNESCO has coordinated national studies in China, France, Kuwait, Norway, Peru, the Ukraine Socialist Republic and Zambia, on the images of women and men projected by school textbooks and children's literature (Michel 1986). These studies aimed at alerting the international community to the problem of sexism in books. It was expected that findings obtained from these studies would enable the authorities in the respective countries and other UN countries

to have a clearer picture of the problem and take appropriate actions to track down and eliminate sexist prejudices in school textbooks (Michel 1986).

Five years after the 3rd UN Women World Conference (1985), a UNESCO conference on Education for All was held in Jomtien. When making conference deliberations on universalization, access and promoting equality, it was recommended, "*all gender stereotyping should be eliminated in the schooling systems*". This recommendation was adopted upon realizing that the problem of gender stereotyping was still in existence. There was concern that continued publication of textbooks that were not gender sensitive would deter the realization of education for all.

UNFPA concern for the girl child is stipulated in the Cairo International Conference on Population and Development (ICPD) of 1994. In this conference, UN members were called upon to promote equal treatment of girls and boys in education. Relating to gender bias in textbooks, UNFPA recommended:

"Schools should seek to eliminate stereotypes in all educational materials that reinforce existing inequalities between males and females that undermine girls' self esteem" (UNFPA 1994:26).

1.1.3 The role of feminists in eliminating sexism in textbooks

The struggle to eliminate gender stereotypes in textbooks can well be understood by tracing the work of feminists towards the struggle to eliminate sexism in the schooling system, especially in textbooks. According to Sprague (n.d), the work on sexism in children's books started in Scandinavian countries in early 1960s and then spread to Britain, North America, New Zealand, Australia and other European countries. According to Michel (1986) and Sprague (n.d.) among others, feminists have been in the forefront in condemning discrimination against females in the schooling system. It is documented that the first category of people to notice sexist prejudices and stereotypes in textbooks were women teachers. This realization led to the carrying out of research to determine the type and extent of sexism in textbooks. The findings from these studies were used to show state organs of particular countries the extent of sexism in instructional materials. Using these findings feminists at the same time condemned the sexist situation in these books.

1.1.4 Efforts to stamp out sexism in textbooks in developed countries

According to Michel (1986) research studies on gender prejudices in textbooks were carried out in different developed countries including the US, France and Norway. The findings from such studies were used to support campaigns in denouncing sexism in textbooks. In the US, for example, it is recorded that such campaigns yielded some positive results as publishers developed guidelines that would be used in producing textbooks that are free of gender bias.

The pressure exerted by feminists in France also yielded positive results. It led the Ministry of Education in France to issue an order that starting from 1982/83 school year, an educational campaign against sexist prejudices was to be launched. A commission was established by the Ministry of Education charged with the responsibility to oversee this campaign. The campaign aimed at combating sexist prejudice in the curricula for all subjects and educational activities. To make this campaign more articulate, an overall survey on the situation of textbooks was launched in order to determine if the portrayal of gender roles was sexist or not. The findings indicated that most of the textbooks were sexist (Michel 1986).

In Norway, the Ministry of Education and Religion in 1974 supplied head teachers and staff of primary schools with a national education syllabus designed to eliminate sexism from textbooks. In Austria, an intergovernmental working group had in 1984 produced a guide on how to portray men and women and the family members in school textbooks in a non-sexist manner.

Numerous lessons can be learnt from the struggles and efforts exerted in combating sexism in textbooks. It can be noted for example, that struggles take a long time to realize the intended objectives. It can also be noted that in order to be successful, there is need to involve various categories of people, both in government and civic society organizations. In these countries, research findings show that the struggle is not yet complete, as studies on gender stereotyping in textbooks continue to be carried out and that the findings show that gender bias in textbooks still exists in these countries in varying degrees.

1.1.5 Portrayal of gender roles in developing countries

The call by the UN and its agencies on the need to have textbooks that are free from gender bias has had an impact on most countries including developing countries within the UN system. Most UN member countries have acceded and ratified the UN conventions and are therefore, part and parcel of UN deliberations. The speed at which the deliberations are implemented depends on the government of a given country in relation to internal and international influences that prevail.

A review of literature of two international studies has covered both developed and developing countries. The UNESCO study, as has been noted earlier on, involved some countries in Africa, Asia, Europe and Latin America. On the other hand, studies coordinated by the Commonwealth Secretariat on Gender Bias in School Textbooks (Davies 1995) involved countries in the Caribbean (Barbados, Guyana, Jamaica, St. Kitts and Nevis, and Trinidad and Tobago). In Africa eleven Commonwealth countries were involved in the study. Tanzania was not among them. In Asia the studies were carried out in Bangladesh, India and Malaysia. Studies were also done in Australia on basal and supplementary reading books commonly used in Australian classrooms and essentially similar to those used in Canada and Britain.

The findings by the UNESCO study indicated that gender role stereotyping existed in children's literature and school textbooks to a varying degree in all countries surveyed (Michel, 1986). Findings of studies organized by the Commonwealth Secretariat also showed that there were gender biases in school textbooks. In all surveyed Caribbean countries for example, textbooks in all subjects tended to be against females (Davies 1995). The same conclusions could also be made on the findings in studies carried out in commonwealth countries in Africa and Asia and also of Australia. The overall conclusion of the findings of the Commonwealth study is that that gender stereotyping is a problem in all cultures (Davies 1995).

1.1.6 African countries and gender roles in textbooks

As it has been noted above, studies that were carried out under the auspices of UNESCO and that of the Commonwealth Secretariat did also involve African states. In this section the discussion will examine regional deliberations and efforts to eliminate gender stereotyping in a given nation. Studies by UNESCO and the Commonwealth Secretariat are not, therefore, included.

In addressing the issue of gender equity in the schooling system in Africa, a number of declarations have been promulgated. There has been the “Gaborone Plan of Action of Girls and Women of 1992” and the “Ouagadougou Declaration on the Education of Girls of 1993”. At the Southern Regional level, the Southern Africa Development Community (SADC) state leaders in 1997 signed a Gender and Development Declaration. In this declaration, a commitment was adopted calling upon member states to uphold gender equality in the education sphere. As regards gender in general, the SADC Gender and Development declaration aims at “eradicating of all gender inequalities.” Further more the SADC leaders committed themselves to:

“Enhancing access to quality education by women and men, and removing gender stereotyping in the curriculum, career choices and professions”.

Further examples include studies that were carried out in Zimbabwe (Lawrence and Tshuma 1992) and Togo (cited by Obura 1994). In Kenya, Obura (1991) carried out a study entitled *“Changing Images: Portrayal of Girls and Women in Kenyan Textbooks.”* Findings of this study indicated that there was gender bias in the portrayal of the images of males and females. The findings from the study by Obura that there was gender bias in the Kenyan textbooks also apply to the findings of studies done in Togo, Zimbabwe and Botswana.

1.1.7 Towards eliminating gender stereotyping in textbooks in Tanzania

Tanzania attained its independence in 1961. Up to February 1995, there had been no education policy in Tanzania that took into consideration of gender as one of its components. According to Mbilinyi et al (1991) the much-fancied Tanzania Education for Self Reliance (ESR) declaration of 1967 did not include efforts to transform oppressive gender relations that prevailed within the education system. Gender inequalities in the education system were not considered a problem or a priority in the ESR policy. According to Mbilinyi et al (1991) major elements of the schooling system that include the use of textbooks in the teaching and learning process continued to reinforce gender oppressive relations. Lack of policy to address gender issues in the education sphere in Tanzania had negatively affected gender transformation within the schooling system. The lack of positive government policy in relation to education had rendered women barriers invisible, thus hindering effective support mechanisms.

It was not until February 1995 that Tanzania came up with the *Education and Training Policy* that had a gender consideration. Chapter three of the policy concerns issues of access and

equity in education and training. Girls' education is one of the issues highlighted in connection with access and equity. The policy categorically states that in order to raise the participation rate of females, the following should, among other strategies be implemented:

"Education and school systems shall eliminate gender stereotyping through curricula, textbooks and classrooms practices" (Ministry of Education and Culture 1995:9).

The setting under which textbooks for government primary schools in Tanzania are produced and the mechanisms for ensuring that they are free from gender stereotyping can best be understood by the following discussion.

The production of the forty textbooks that have been content analyzed can well be understood in the light of the Tanzanian textbook policy and accompanying circulars that emerged from 1991 -1998. In 1991 the government came up with the policy on Production and Distribution of School/College Textbooks (MOEC 1991). The main objectives of this policy were to liberalize, privatize and commercialize the production and distribution of textbooks, activities that had hitherto been monopolized by the government.

In view of the new policy, the government moved towards confining itself to curriculum development (the responsibility of Tanzania Institute of Education-TIE) and textbook standard setting and monitoring (the responsibility of Book Management Unit - BMU). The BMU and TIE, among other institutions, were given the responsibility of making a smooth transition to the birth of the new liberalized system of school textbooks provisioning. The government progressively dismantled the state controlled centralized system of book production that existed to allow market based system. A fully commercialized system of textbook production was therefore, endorsed. Local commercial publishers effectively got into the school book production industry. The textbook policy coincided with the launching by MOEC of a new primary school syllabus. The ministry effected a reduction of school subjects from 13 (1988) to 7 in 1993 (Komba 1997). Prior to this policy, the TIE (MOEC's institution responsible for curriculum development) had the monopoly of manuscript development and published all textbooks in all subjects taught in government primary schools.

In 1994 the MOEC initiated a Pilot Project of Publishing (PPP) as a strategy to operationalize the 1991 textbook policy. The aim of PPP was to equip local commercial publishers with requisite skills in commercial publishing and to empower them financially. It was through

the implementation of PPP that by 2002 local commercial publishers took the responsibility in the development of manuscripts and publishing textbooks. The transition period from 1994 to 2002 meant that while the Tanzania Institute of Education was responsible for writing the syllabus and developing manuscripts, it was not responsible for publishing them. The role of publishing the manuscripts fell under local commercial publishers. Local commercial publishers were contracted to publish manuscripts written by TIE. Other publishers were contracted to revise some titles, which were already in use in schools.

Through the process of empowering the local commercial publishers, a systematic control mechanism to ascertain quality, relevancy and suitability of all educational material used in schools and teachers colleges was established in 1998. In 1998 the MOEC launched the New Approval System of Educational Books via Education Secular No. 2 of 1998. This systematic quality control mechanism is done through the Educational Materials Approval Committee (EMAC) of the MOEC.

The EMAC evaluates the manuscripts from publishers and provides the publishers with feedback on manuscripts' suitability and relevancy. EMAC's role is also to approve the use of education materials including textbooks in schools and teachers' colleges.

The EMAC's role, through evaluators of the quality of manuscripts, uses a checklist comprising the following themes:

- Correspondence with the syllabus;
- Objective of its presentation;
- Correctness of facts;
- Suitability of language used; and
- Suitability of design.

The approval system for educational books is a service provided by the government to publishers to enhance the provision of quality educational books. The service is intended to protect the education system from being used as a dumping ground of undesirable books. This is especially crucial in a situation where there has been a move from a single textbook to multi-textbook use in the schooling system. The approval system coordinated by MOEC

operates in a collaborative manner where the government, evaluators and publishers are involved.

It is on the recognition of the need to eliminate gender role stereotyping through textbooks, that the statement of the problem is formed. The statement of the problem is therefore, discussed in the following section.

1.2 Statement of the Problem

The thrust of the policy to eliminate gender stereotyping in the schooling system, especially in textbooks, has not been realized. The translation of the policy into focused action is important if the policy has to realize the set objectives. In order to eliminate gender stereotyping in textbooks, there was thus the need to carry out a systematic research that would show the extent and the form in which gender stereotyping is portrayed in primary school textbooks. Available literature in Tanzania on textbooks denotes that curriculum reform to get rid of gender stereotyping and negative imagery of girls and women has neither been implemented in educational institutions nor effected by the Tanzania Institute of Education (TIE) responsible for curriculum development (TGNP 1993). So despite policy statements indicating a move towards making textbooks gender friendly, gender stereotyping still prevails. So far no intensive and systematic study has been carried out to determine the extent and form of the depiction of gender roles stereotyping in textbooks (Komba 1997 and Ministry of Community Affairs, Women and Children 1995).

The Tanzanian report to the 4th Women World Conference in September 1995 by the Ministry of Community Development, Women Affairs, and Children of the Government of Tanzania revealed that textbooks in Tanzania were gender stereotyped. Komba (1997), in discussing the issue of textbooks reform and improvement of the quality of education points to the lack of a study to show the portrayal of gender roles in textbooks. While he acknowledges the importance of textbooks' availability and use as being critical in the improvement of educational quality, especially in terms of achievement, he urges the need to study more critically the problem of gender bias in the Tanzanian context, both as written and as pedagogically used in the classroom.

It is argued that textbooks that are free from gender bias are better instruments for raising academic achievement generally and among girls in particular. The issue of gender stereotyping in the education system has been a question of concern because of its potential negative effects on learners. While a detailed discussion on the effects of gender stereotyping in textbooks is done in chapter 3 (Section 3.6), the following is a summary of the effects on learners.

Researchers who are concerned with the provision of education that recognizes the importance of gender equity in the education processes, have addressed the negative effects that gender stereotyped textbooks have on readers. These researchers, who include, among others, Michel (1986), Davies (1995), Obura (1991), and Koza (1994), have pointed out the following negative effects:

- The characters who are omitted has the implication that they are of less value, importance and significance in the society;
- Some of the readers tend to lack role models as a result of the omission of some characters;
- Gender stereotyped messages influence boys and girls about their future roles including careers. Professional goals are curbed to fit into conventional stereotyped professions;
- Acquiring a narrow view of the professional goals open to them and hence the perceptions of their future roles in the society being distorted.
- Males ' emotional and spiritual needs and their roles in the family as husbands and fathers are affected negatively as children's experiences are narrowed to the traditional domains of activities which are gender biased.
- Perpetuation and reinforcement of the existing inequality between females and males. Gender stereotyping in textbooks does not therefore, provide gender equity, not only in the schooling system but also the community at large. Such depiction stands in the way of aspired gender equality that is set at national and international charters;
- Distortion of self esteem of readers. The internalization of the perceived gender role messages and expectations, and also the failure to live to such expectations would cause the individual to feel less about herself or himself and thus destroying one's self esteem. Gender stereotyped messages affect the learners' self-concept, potential of achievement and perceptions of others. Children can thus be prevented from fulfilling their potential in mastering some subjects; and

- Limitation to development of learners' full intellectual, emotional and vocational potentials. Gender stereotyping in the long run prevents boys and girls from learning some academic subjects leading them not to join careers related to these subjects.

1.3 Objectives of the Study

This study had the following objectives:

- To investigate through Content Analysis (CA) using pre-set categories, the portrayal of gender roles in 40 primary school textbooks currently in use in the six subjects taught in Tanzanian primary schools to determine the manner and extent of:
 - Gender roles stereotyping,
 - Gender bias, and
 - Sexism;
- To explore in textbooks the presence of gender biased language;
- To investigate the extent to which and in what forms power relations between female and male characters are reflected in textbooks;
- To examine the means, strategies and programmes that have been put in place by institutions charged with the production of textbooks; and
- To establish baseline data in the analysis of the depiction of gender roles in textbooks that would be used in future to guide in textbook writing or research on the depiction of gender roles.

1.3.1 Research questions

In order to put the theoretical aspects of gender policy on textbooks into action and get rid of gender role stereotypes the main research problem is supported by the main question: "How are gender roles depicted in textbooks currently in use in primary schools?" This major question has some sub-questions as well. These include, inter alia:

- What are the identifiable indications of gender roles stereotyping in textbooks of the six subjects (Kiswahili, English, Mathematics, Social Studies, Science, and Vocational Skills) taught in Tanzanian government primary schools?
- In what form in the illustrations and text does gender role stereotyping appear, in terms of the presentation of reproductive and productive roles, description of the personality traits of the characters, association with the use of technology, carrying out of activities and power relationships in terms of leadership and property ownership? and

- What effective mechanisms for ensuring production of gender bias free textbooks are provided by the Ministry of Education and Culture and other institutions (publishers) responsible for the production of primary school textbooks?

1.3.2 Research methodology

Both quantitative and qualitative approaches have been used in the investigation and analysis. At the quantitative level, the existence of gender related concepts was counted to establish frequencies of appearance. The gender roles as portrayed by male and female characters through selected categories were compared using percentages for each textbook, across textbooks of a specific subject and across subjects of the sample. To facilitate data analysis at this level, tables were used to summarize the findings. The quantitative analysis showed the existence and the extent to which gender roles were portrayed in the content analyzed textbooks.

The second level of investigation and analysis has been at qualitative level where an in depth understanding was developed on how gender roles have been portrayed. The description was on the basis of the identified gender roles determined at the quantitative level of analysis. A description in the form of narration of relationships among concepts has been done. Other encompassing categories were combined (from quantitative) and were formulated for narration purposes. For example, the qualitative analysis of power as one of such categories, took into account the different aspects of power, which have included ownership of property and goods, leadership position held by characters and the association of characters to technology. The kinds of reproductive and productive roles assigned to characters were also included in the categories for content analysis. This facilitated an understanding of power as it relates to gender. In looking at the category power, the depiction of power was probed into using illustrations and the content in the text.

1.4 Motivation and Significance of the Study

The motivation and importance of this research is grounded on the role of textbooks in the teaching and learning process. Textbooks are important element in teaching and learning as they create the foundation of classroom activities. They constitute the basis of classroom teaching as they provide the academic and technical knowledge about the subject matter

emanating from the official/intended curriculum. Textbooks also contain knowledge about the world in general. According to Kabira and Masinjila (1997) writers of textbooks create a human world in which children learn about what people do and how they relate to one another. It is this second part of the humanizing effect of textbooks that if not handled carefully could lead to the discrimination of some categories of learners and in this case a discrimination that is based on gender role stereotyping. Such gender role stereotyping is done in a subtle and in most cases in an unconscious way. The tone and development of content and illustrations used in a textbook may foster in the learner positive and negative attitudes about self, sex, occupations, life expectations and life chances. It should be noted that the implicit messages presented in textbooks in terms of gender roles are not part of the official/explicit curriculum but a realization of hidden curriculum. Textbooks therefore not only convey content that matches the official curriculum but also the unintended gender biased hidden messages. While reading these textbooks in implementing the formal curriculum learners are also socialized through gender roles on attitudes and practices that condone gender inequality. This, results into inequitable education in the education process for girls compared to boys.

The knowledge gap on the extent to which gender roles are stereotyped in textbooks has to be bridged by carrying out an intensive and systematic study on the portrayal of gender in textbooks used in primary schools. As it has been noted elsewhere (Fredriksson 1999), proper implementation of policies becomes difficult when it is not based on adequate information on the issue. The findings of the study are expected therefore to assist in various ways in the translation of the *Education and Training Policy* into action by devising strategic plans into focused action. Such strategic plans will lead to:

- Providing a practical guide to officials and institutions involved in the production of textbooks for tracking down and eliminating sexist prejudice;
- Revising/writing of textbooks with the aim of eliminating gender biases so that the textbooks correspond with efforts of promoting gender equality in the schooling/ education system not only for primary school but also other levels of the education system in Tanzania;
- Alerting the Tanzanian public on the problem of gender bias in school textbooks and the negative impact they have on learners;
- Sensitizing policy makers, educators, writers/authors of textbooks, publishers and other interested persons on the extent of prevalence of gender roles stereotyping in textbooks so that positive action can be solicited from them;

- Encourage the promotion and support of actions to eliminate the problem of sexism in textbooks; and
- Assist curriculum developers to design a gender inclusive curriculum by making deliberate efforts to incorporate what has been identified in the hidden curriculum into the official/intended curriculum. For example, instead of students reading textbooks passively, teaching methods that encourage critical reading skills on the part of students can be developed. Such methods would assist pupils to question gender related aspects in the textbooks. The training of teachers could also be done from a gender perspective based on the research findings. In this way the schooling process would take into account gender educational concerns.

1.5 Theoretical Orientation of the Study

Three theoretical frameworks have been used to describe and analyze the depiction of gender roles in textbooks with a focus on the potential hidden gender role messages conveyed to learners and the effects on them. The three theoretical frameworks are the *Liberal Feminism*, *hidden curriculum theory* and the corresponding *Social Learning Theory*.

1.5.1 Liberal Feminism and Textbooks

Liberal feminism as a branch of feminism is a social movement that seeks to change the traditional role and image of women to end sexism, and to attain for women equal rights with men (Mackenzie 1993). Liberal feminism under the umbrella of feminism proposes the need to expose and critique possible male bias in the schooling system that might perpetuate the exclusion or subordination of women in society (Hayes 1992).

As regards education, which is supposed to change attitudes, beliefs and values and bring about gender equality, liberal feminism focuses on socialization, gender roles and gender stereotyping (Acker 1991). According to this framework, girls and boys are socialized into traditional attitudes and orientations. It is argued that the impact of such socialization deters the full participation of males and females in the development process. This socialization process conveys hidden messages which functions through hidden curriculum in textbooks and affects both boys and girls negatively.

In order to remove barriers that prevent females and males from reaching their full potential, liberal feminists have employed different strategies for the same. Such strategies aiming at changing attitudes of children and teachers include:

- Analyzing curricula materials to document gender stereotypes in textbooks. This is done with the purpose of eliminating the identified gender stereotypes so that in the long run the gender stereotyping would be eliminated from textbooks, thus adhering to the provision of gender equity as required by the Education and Training Policy of Tanzania; and
- Provide pre- and in-service courses for teachers so as to equip them with knowledge and skills that would enable them to combat sexism in carrying out their day-to-day teaching activities.

This study addresses the first strategy by content analyzing gender roles in textbooks to determine gender equity. A detailed literature review is carried out in chapter two on the findings of the portrayal of gender roles in textbooks on the basis of liberal feminist theory. A detailed discussion of this theoretical framework is done in Chapter Two.

1.5.2 Hidden Curriculum Theory

As the title of this study indicates the portrayal of gender roles in textbooks is examined from the hidden curriculum perspective. In this section hidden curriculum theory is briefly discussed in relation to gender. A detailed discussion of hidden curriculum is done in Chapter Three, where its relation with the explicit official curriculum is shown and its effects of gender role hidden messages on users are also shown.

From a feminist perspective (Abot and Wallace, n.d., cited in www.sociology.org.uk) there are four major areas of hidden curriculum within the schooling process that disadvantages girls. These are:

- Gender biased text books where males compared with females
 - Appear more frequently and at times women failing to feature in text books
 - Are more likely shown in active than passive
 - Clear stereotypes about how males & females should behave,
 - Language generally favors masculine forms of expressions & women portrays in subordinates role

- Stereotyped attitudes where:
 - Girls' academic intelligence is underestimated
 - Teachers tend to see girls future in terms of marriage, child rearing & domestic work
 - Girls future careers are stereotyped into feminine stereotyped
 - The classroom interaction between teachers and pupils favors boys
- Subject choice and activities remain gendered where pupils are given choice.
- Academic hierarchy where men compared to women occupy highest positions in the administrative structure of schools, children are therefore surrounded by role models that suggest men should occupy positions of highest status.

The above four aspects of hidden curriculum are significant in relation to the concept of gendered curriculum textbooks the stereotyping of gender roles is part of the hidden curriculum. In implementing the official curriculum using textbooks children receive and internalize gender roles hidden messages. These messages serve to reproduce gender social inequalities between boy and girl learners in the schooling process.

To understand how these gender role hidden messages are internalized by boy and girl learners by reading textbooks, it is important to discuss the Social Learning Theory as corresponding to the Hidden Curriculum Theory. The Social Learning Theory which is briefly discussed below.

1.5.3 Social Learning Theory

Social Learning Theory is associated with the acquisition of identity in different spheres including gender. Different social learning theorists cited in Zanken (1985) including Bandura (1972), Mischel (1973) and Rosenthell and Zimmerman (1978) stress the importance of reinforcement and imitation in the acquisition of gender identity. Character identification leads students to mould their own behaviours after role models (Basch, 1972 as quoted by Hayes 1992). Lawrence and Tshuma (1992) cite Fresher and Walker (1972) who state that social learning theory predicts that children learn what constitutes gender appropriate behaviours from gender role expectations and role models they observe around them. According to Scot (1981) as quoted by Lawrence and Tshuma (1992) instructional materials present numerous gender role models to pupils. Thus, if for example female students cannot find relevant role models in textbooks they read, their personality growth becomes inhibited. The books they

read both in and out of school provide them, a major source of role models. If female characters are depicted in limited stereotyping roles, female students tend to limit their own aspirations. This study has also used this theory to examine how gender roles have been reflected by the socialization process through textbooks on what is considered as gender "appropriate" and expected behaviour through the portrayed role models.

A detailed discussion of this theory in relation to the effects of gender role messages to readers through hidden curriculum is discussed in chapter three of the study.

1.6 Definition of Key Terms

In order to comprehend the key concepts used in this study, the following definitions are an essential component:

- **Content analysis** is a research method that deals with systematic examination of documents to provide data that might be categorically classified and evaluated and thus provide a description and interpretations of situations, conditions, relationships, attitudes, system trends, processes or phenomena as they exist at a given time. In this study content analysis has been performed to determine the portrayal of gender roles in primary school textbooks using selected categories;
- **Feminism** is a social movement that seeks to change the traditional role and image of women, to end sexism and attain for women equal rights with men;
- **Gender** as opposed to sex (sex being a biological concept) is a socio-cultural specific set of characteristics that identifies the social behaviour of women and men and the relationship between them. Gender, therefore, refers not simply to women or men, but to the relationship between them, and the way this relationship is socially constructed. Because it is a relational term, gender must include females and males;
- **Gender roles** are behaviours, attitudes, interests and skills that a culture considers appropriate for females and males, and that the genders are expected to fulfil. People in the course of time have created gender roles unlike sex roles. As a social construct, gender roles are not fixed and can thus change;
- **Gender stereotyping** is the tendency of a given culture to assign particular traits, characteristics and roles distinctly to women or men. The assumption behind stereotyping is that the assembled attributes of men apply to all men and those of women apply to all women;

- **Sexism** is a collection of attitudes, beliefs and behaviours that are a result of the assumption that one sex is superior to the other. On the basis of sex, people are demeaned, discriminated, excluded, underrepresented and stereotyped.
- **Hidden curriculum** refers to values, attitudes and behaviours that are not part of the official curriculum, but which are nevertheless communicated to students in educational institution; and
- **Socialization** is the process of social interaction through which people acquire personality and learn the ways of their society. People are taught to accept and perform the roles and functions that society gives them. Men and women are socialized into accepting different gender roles from birth.

1.7 Delimitation of the Study

Considering that the topic is a broad one, it is important to outline the scope of this study. For this study:

- The determination of the relationship between text and the users of textbooks (learners and teachers) in a classroom situation has not been part of the study objectives. Due to limited time, the study did not address the question of how textbooks are perceived and used by teachers and learners from a gender perspective; and
- Certain aspects of the education process which include teacher pedagogy, classroom interaction structure, extra curricular activities and students' counselling services; which have a bearing on gender role acquisition have however, not been covered. The study has been limited to the portrayal of gender roles in textbooks. The elimination of portrayal of gender roles stereotyping in textbooks and hence its effects on learners is just one of the ways that the schooling process could adapt to bring about gender equality.

1.8 Chapter Division

The thesis of this study/research is composed of the following six chapters:

Chapter One

This is an introductory chapter. It outlines the background of the study, describes the statement of the problem, and states the objectives of the research and the accompanying research questions. Discussed briefly in this chapter also are the two theoretical

underpinnings of the study. Further, the motivation and significance of the study in the thrust of eliminating gender stereotyping in textbooks as a requirement of the Education and Training Policy of Tanzania is discussed. Definitions of key concepts used in the study are given. The setting under which the content analyzed textbooks were produced has been done. Also outlined are the limitations of the study.

Chapter Two

The chapter presents review of literature on gender roles stereotyping and sexism in textbooks from an international perspective. It covers both developed and developing countries. The liberal feminist theoretical framework is discussed in details as a basis of determining the differences of the portrayal of gender roles between female and male characters in textbooks.

Chapter Three

The chapter carries out a review of literature on the effects of gender roles on learners from a hidden curriculum perspective. A detailed account of the Social Learning Theory is given as it relates to the acquisition of gender identity and modelling through the depiction of textbook characters.

Chapter Four

The chapter outlines research design and research methods. Content analysis and interviews are explained at length by showing the appropriate procedures in using them. Specific procedures on how these methods have been implemented are also described in this chapter.

Chapter Five

The chapter presents study findings and analysis of data.

Chapter Six

The chapter provides a summary, conclusion and recommendations that would serve as a source of insights into and a basis of what could be done to eliminate gender stereotyping in textbooks.

CHAPTER TWO

2.0 LITERATURE REVIEW ON THE PORTRAYAL OF GENDER ROLES IN TEXTBOOKS

2.1 Introduction

The manner in which gender roles are presented in school instructional materials including textbooks has been a concern for quite some time. Findings from different studies have been amply documented. Efforts have been made to analyze gender roles in instructional materials at different levels of the education system including pre primary, primary, secondary, teacher training colleges and universities. In the studies, analyses have included textbooks from various disciplines used at these educational levels.

The studies of interest here are those which have addressed gender roles by analyzing pictorial and text portrayals of female and male characters. Pictorial presentation refers to illustrations, which include pictures and other representations in the form of drawings within a textbook. Textual materials of female and male characters relate to the narration of the content in the textbook. It is suggested that it is often the illustrations as much as written sentences that impress readily observable images on the minds and imaginations of the readers. Illustrations, for example, are important in forming images because many people, especially children with developing reading skills, form impressions based on virtual presentation of ideas (Obura 1991).

The studies covered in this literature review, fall into two parts, first there are those which have exclusively concentrated on the analysis of illustrations (Koza, 1994). Second, there are those which have concentrated exclusively on the written text (Korea Working Women Network 1997). In addition there are other studies that have analyzed both dimensions of the textbooks (illustrations and text). The studies carried out by Obura (1991) and Michel (1986) are examples of studies, which examined both dimensions.

In these studies, the researchers have analyzed data both quantitatively and qualitatively. Whereas statistical comparison has been used to depict the portrayal of gender roles in textbook characters, in-depth meanings of the messages have been presented qualitatively using different categories of gender. In carrying out the studies, researchers have developed categories for the analysis. The categories are based on some of the definitions of gender

roles (The National Commission on the Role of Filipino Women, n.d.). Two of these definitions, which have a bearing on the categories, are:

- Culturally defined attitudes, behaviors and social positions of each sex as justified by gender stereotypes; and
- The activities ascribed to men and women on the basis of perceived gender differences. While men are mainly identified with productive roles, women have a triple role: a productive role, reproductive (or domestic) role, and a community-managing role. Gender roles and responsibilities vary between cultures and can change overtime.

Categories that have been selected for examining the portrayal of gender roles in textbooks from different studies include:

- The frequency and manner of appearance of male and female characters;
- The depiction of occupational, social and political activities by the characters;
- The pegging of personality traits to textbook characters;
- The presentation on the use of technology;
- The portrayal of property ownership and goods; and
- Use of gender biased language.

The analysis on the portrayal of gender roles has applied feminism as a theoretical framework. What constitutes feminism and its application to content analysis of gender is discussed in the following section.

2.2 Feminism and Gender Roles

2.2.1 Introduction

This section of literature review focuses on the first of the two theoretical frameworks used in this study. This framework relates to content analysis of the portrayal of gender roles in textbooks between male and female characters. The thrust of feminism and the three main types of feminism have been briefly discussed. Also in this section is a detailed discussion of liberal feminism. This theory has been an instrumental factor in advocating gender changes in the education sphere, particularly gender issues as reflected in textbooks.

2.2.2 The impetus of feminism

Currently feminism is looked upon as a social and political movement whose objective is to strive for equality of rights, status and power for both women and men. As a movement it seeks to change the traditional roles and images of women, to end sexism and attain for women equal rights with men (Mackenzie 1993:156). It is based on the belief that women and men are equal and should be equally valued as well as have equal rights. Feminism addresses, among other gender-related issues, the question of women subordination to men. The feminist theoretical framework therefore, probes into how women's subordination arose, why it is perpetuated and how it might be changed (Acker 1992: 142). Feminists seek to end women's subordination (Basow 1993:329). They argue that differential valuing of each sex must end so that equality can prevail. Gender roles must be changed since they are restrictive to a particular gender and as a result liberation is not ensured. According to Acker (1987) and Stromquist (1990) feminism has been used to guide the search for answers about sex and gender. Within feminism suggestions are made on how gender inequalities can be stamped out.

2.2.3 Main types of feminism

Within the broad movement of feminism there are various types of orientations. While the general objective of feminism is the same, feminists differ among themselves with respect to their perceptions of the causes of women's subordination as well as the solutions to end it. Mackenzie (1993) classifies feminism into cultural, ecofeminism, global, liberal, socialist and radical. Acker (1987) and Basow (1993) on the other hand have categorized feminism into three main types of feminism namely; liberal, socialist and radical (Acker). Whereas this study will apply liberal feminism in content analysing of gender roles as depicted in textbooks from a hidden curriculum perspective, the following is a brief discussion of the other two main types of feminism, namely, socialist and radical.

Socialist feminism emphasizes the necessity of changing the economic system as a precondition for establishing gender equality. Economic oppression and sexist oppression are both seen as fundamental and reinforcing each other. It is documented that most of the activities of socialist feminists are aimed at educating people about the relationship between women's oppression and economic class oppression (Basow 1993). Socialist feminists are organized around economic issues as well as health care and childcare issues. Men's sexist attitudes are seen as stemming from the capitalist economic system. Socialist feminists

therefore, believe that the capitalist system itself must be dismantled in order to realize gender equality.

In contrast to socialist feminism which focuses on economic and sexist oppression, *radical feminism* maintains that men's oppression of women primarily serves as a model for all other oppression such as that based on economy and race. The goal of radical feminism is to abolish class and gender inequality and create a new culture based on a more balanced synthesis of male and female modes of power. It is proposed that women's oppression by men can be ended when women centred systems and beliefs are established. Change is thus sought at all levels, both personal and institutional. In this context, the personal is seen as political. The goals of radical feminism can be accomplished through grassroots organizations, confrontational politics and by building an alternative culture (Basow 1993).

2.2.4 The thrust of liberal feminism

Contemporary liberal feminists focus fundamentally upon gender inequality caused by gender discrimination. They stress on equality of opportunity. Their goal is to obtain for women economic, political and social rights equal to those of men within the existing system. From the liberal feminist perspective, the state/government as an essential benevolent institution for its citizens has the responsibility of bringing about gender equality.

2.2.5 Liberal feminism in the context of this study

The need for the advancement of gender equality is indeed a global truism and caters across all countries of the world. In chapter one we have noted that a number of international conventions and declarations have been adopted by most countries in the UN system. These conventions and declarations define among other issues, gender equality within the schooling system specifically, gender stereotyping in textbooks (UN-CEDAW 1979, UNFPA 1994, Davies 1995 and SADC 1997).

While the thrust of liberal feminism is applicable to many countries in terms of striving for an education system that takes gender equality on board, it is important that the historical, cultural, socio-economic and geographical gendered context of a given country where the research is being carried out has to be taken into consideration. The epochs of colonialism and the post colonial period in relation to gender equality/inequality have to be considered. Africa needs to create an international awareness to its local peculiarities.

Deep gender inequalities in the education system exist between men and women due to historical, cultural and economic reasons that prevent women from asserting their rights within the education system. Liberal feminism focuses on girls' failure or underachievement in the schooling system.

The portrayal of gender roles in textbooks for example, have to be linked to the context of the location under study. Challenges posed by gender oppression in different African context in the education system and the way gender roles are portrayed in the textbooks have to be contextualized.

There are differences between the way gender oppression manifests itself in the western world and in African countries. Such differences in African countries from western countries include:

- A skewed work load of women in African settings. Magnitude of burden distinguishes the woman in Africa in the south from the woman in the north developed countries.
- A culturally dichotomy between modern and traditional woman within the same country. Gender discrimination implicit in male patriarchy dominated society cuts across between modern and traditional woman.
- The gender inequality is culturally accepted over generations.
- There is a big influence of customary law unlike what prevails in developed countries of the western world. Customary laws are in conflict with statutory laws which disadvantage females. Women are for example excluded from inheritance and property rights.
- Gender violence in many communities in Tanzania for example is rampant and such violence is condoned. Such violence as the practice of Female Genital Mutilation (FGM) is sanctioned in such communities in Tanzania but most likely to be non-existent in the developed world except with the migrant populations.

Liberal feminism challenges gender biased socialization in different contexts. Challenges of liberal feminisms of culturally marginalized women have therefore some relevance to Africa. Feminism challenges traditional gender orders of male dominance and female subordination. Liberal feminism has inspired to break cultural orders within the schooling process which include eliminating gender role stereotyping in textbooks. Feminism has fundamentally changed the way many think about the education for girls and boys.

In Tanzania gender activism that started in the last three decades has led to having an Education and Training Policy which addresses gender issues in the education system and particularly, the elimination of gender role stereotyping in textbooks (MOEC 1995).

In presenting and the discussion of the findings (Chapter Five) therefore, findings of studies related to gender issues prevailing in the Tanzania context and other African countries have been taken into account.

2.2.6 Liberal feminism and education

Education has the capability of perpetuating inequality but it also has the power to redress it. Liberal feminism scholarship has therefore, potentially dramatic implications in the field of education. It emphasises the need to expose and critique possible male bias in education theory and practice that might perpetuate the exclusion or subordination of women. It is for this reason that liberal feminists have been active in challenging sexism in schools. They have concerned themselves with eradicating sexist instructional materials and encouraging girls to pursue predominantly male careers as those in science and technology.

Liberal feminism's focus in education has been on *gender socialization*, *gender roles* and *gender stereotypes* (Acker 1987). The socialization process made through instructional materials, curricula counselling, school organization and the general school atmosphere, leads into girls and boys being socialized into traditional attitudes and orientations, which result in limiting roles. This socialization process disadvantages women and girls. This is because they are conditioned to passivity and subservience (Broverman et al 1972, Hoffman 1972 and Horner 1972 cited by Koza 1994). This socialization is detrimental to the full development and participation of both females and males in the society. It is at the same time argued that such socialization encourages patterns of interpersonal relationship between males and females that is largely working to the disadvantage of females. The end result is that the females are socialised and placed in a position of dependence which further perpetuates gender inequality (Stromquist 1990).

Liberal feminists at the same time argue that the socialization process through the hidden messages depicted in textbooks also affects males negatively (Kabira and Masinjila 1997, Michel 1986 and Obura 1991, 1994). An example is given of males being forced to suppress

their emotional and caring potentials, which are essential for the growth and creation of positive relationships.

2.2.7 Strategies employed by liberal feminists in education

As far as liberal feminism is concerned, true equality of opportunity can only be brought about through elimination of gender roles stereotyping in the schooling system and the society at large. The best way to achieve this end is through education. It is through education that traditions and beliefs, which reinforce inequality between the sexes, are challenged thereby helping to break down the legacy of discrimination handed over from one generation to the next. Further more through education, attitudes of pupils, teachers, parents and employees can be changed.

In the bid to realize the objectives of their movement liberal feminists have deployed different techniques aimed at removing barriers that prevent girls from reaching their full potentials. Strategies adopted by liberal feminists to change attitudes of teachers and learners have included:

- Analyzing curriculum materials to document gender stereotypes in textbooks in order to produce materials that are free from gender bias. Further more through research that liberal feminists are able to get data on the evidence of inequalities that exist within the educational system. Such research findings are furnished to decision-making authorities and used to press for programmes of affirmative action (positive discrimination) in the schooling system; and
- Providing training for pre-service student teachers and practicing teachers to assist them to combat sexism in schools.

2.2.8 Noted weaknesses of liberal feminist theoretical framework

Despite the apparent usefulness noted above, liberal feminism has been criticized for weaknesses inherent within the theoretical framework itself. The assumption held by liberal feminists about the state being an essential benevolent institution which is responsible designing strategies to combat gender inequalities is questionable. Those who argue against the belief that the state is capable of removing gender inequalities, base their arguments on research findings from both developed and developing countries which have found out that despite the struggles, for example, towards stamping out gender bias in textbooks since the 1960s and 1970s, gender role stereotypes are still prevalent (Davies 1995).

Another criticism labelled against liberal feminism is that the theory does not trace the roots of gender differentiation; it merely treats content as given, and is silent on the process of construction of gender identity (Mann 1989). Mann has cited several theorists who have made such criticisms. Liberal feminists however, argue that some achievements and dramatic changes towards making textbooks gender friendly have been achieved. They argue that one of the hindering factors has been the dominance of males in decision making authorities which account for the prevailing situation on the prevalence of gender role stereotypes in textbooks (Rogers 1980 cited by Davies 1994).

Despite these criticisms, liberal feminism has achieved much success in a number of areas. Feminist research on education has been an important ingredient to the success of liberal feminism and has contributed to gender justice policy formation across the years. Liberal feminism has been influential in using research and research findings that have clarified the many dimensions of educational inequalities between the sexes thus exploring alternative educational possibilities. The body of evidence produced by research, has clearly demonstrated the rigid realities of female unequal participation and power in the education sector. The evidence has also produced an important political input at the institutional and government levels in persuading those in authority of the injustice of the situation, the need to make changes and the possible form those changes might take. It has been found that it is essential for feminists to use liberal discourse as a means of influencing policy makers. It should be noted that liberal ideas and values have been the basis for all central political and legal reforms achieved in the last hundred years, so their achievements should not be trivialised. Liberal feminists have thus been urged to continue using lobbying and advocacy strategies based on research findings as evidence in combating sexism in textbooks.

The concerns of feminists over the inequalities that are perpetuated in the portrayal of gender roles in textbooks are well presented in the following discussion of the findings from different countries based on identified categories.

2.3 The Depiction of Frequency of Appearances of Characters

2.3.1 Introduction

In this section the frequency of female and male characters' appearance in textbooks is discussed. The discussion is based on what constitutes biased instructional materials in

relation to the frequency and manner of appearances of textbook. The findings cover studies from different countries and involve textbooks of different subjects. Also presented are findings from comparative studies. The following brief discussion helps to clarify the concept of biased materials in relation to the frequency of portrayal of female and male characters.

2.3.2 Gender-biased textbooks in relation to frequency of appearance of characters

Different researchers have discussed what constitutes gender biased sexist instructional materials including textbooks. One of the key variables that relate to biased textbooks is the frequency of appearance of male and female characters in textbooks. Researchers who have reported on this aspect include Grossman 1994, Gupta and Su Yin (1990), Koza (1994), Michel (1986) and Scott and Schau (1984). According to Scott and Schau (1984) for example, one of the features of a biased textbook is when female characters appear less frequently than male characters. Grossman (1994) discusses invisibility of characters as one of the elements of gender-biased textbooks. Invisibility is when certain groups of people are underrepresented or omitted altogether, and in this case, women have been shown to be invisible. Citing Schimitz (1975) Koza (1994) shows that one of the manifestations of gender bias in textbooks includes exclusion and infrequent portrayal of female characters.

One way to indicate the prominence of male or female characters in a textbook is obviously the number of characters depicted in the given textbook. According to Michel (1986) the depiction of male and female characters in terms of frequency of appearance can indicate discriminatory attitudes towards girls and women. This is demonstrated when the frequency of presentation of male characters in a textbook is greater than female characters in both the illustrations and text. At another level, according to Gupta and Su Yin (1990), it is the prominence given to the characters in terms of being the main or minor characters of the story being narrated that tells whether or not it is discriminatory. A character is said to be the main character (protagonist) by being clearly the central character in the story.

2.3.3 Research findings on the frequency of appearance of textbook characters

Researchers in the US have noted the prevalence of gender stereotypes in books for children since the 1960's. As regards to the number of characters depicted, the findings from these studies indicated that male characters always have outnumbered female characters by a

significant proportion. The researchers were interested in finding out if there was gender balance in the depiction of characters and who were the people most portrayed in textbooks. Another variable researchers were interested in was the distribution of the characters into major and minor characters.

Research interest in gender balance in the depiction of textbook characters is based on the view that men and women should be treated equally. The depiction of the frequency of appearances should reflect the proportion of population of males and females in the society. In most countries, approximately 51% of the population are females (Gupta and Su Yin 1990). From this point of view gender bias in depicting textbook characters has not been fair from an equity point of view.

The fact that textbook writers have presented more male than female characters is well documented by a number of researchers. These among others, include: Biraimah (1988), Charlotte (1976), Clarkson (1993) Davies (1995), Gupta and Su Yin (1990), Korea Women Working Network (1997), Koza (1994), Michel (1986), Obura (1991) and Sprague (n.d).

The neglect of women has further been demonstrated by the study done by the Korea Working Women Network (1997). The study looked at the illustrations and text (narration) in elementary school textbooks and found out that the proportion of the frequency of appearance of female characters was 39.2% and 39.1% respectively.

The findings by Foley and Beverly (1990) from 7th grade basal readers in the USA showed that of the 415 characters appearing in three basal texts, 70% of the characters were males. Apart from more male characters being shown, the findings also indicated that male characters were fairly distributed across main, supporting and minor characters. Males appeared most often as main characters. Only 19% of the main characters were females. Female characters were cast most often in supporting or minor roles. At the same time the findings showed that even in these less important roles, male characters appeared twice as often as females. The study by Lobban (1974) cited by Sprague (n.d.), documented published reports on sexism in seven British Reading Schemes at the time she did her study. A total of 225 stories were coded of which 179 had people as their central characters. The results showed that there were very few female characters.

Koza (1994) cited a study by Weitzman and Rizzo (1974) who in the USA examined illustrations in textbooks from five subjects in the USA. The findings in relation to frequency of appearance of characters indicated that females were underrepresented especially in pictures from textbooks for upper grade levels. Overall 31% of the illustrated figures were females. Women were depicted as background figures.

The findings of the UNESCO study (Michel 1986) were very transparent on the number of characters depicted in textbooks that favour male characters. Out of the seven countries studied, it was only in Ukraine that there was gender balance in the depiction of frequency of appearance of textbook characters. The findings in Ukraine textbooks from first to third grade indicated that male and female characters were roughly equal and that female characters were often shown in a positive light than men. The findings from other countries, in the UNESCO study (Michel 1986) were as follows:

- In Peru men and boys were over represented in text (78%) and in illustrations (75%). Moreover the preponderance of male references increased with each successive grade in primary school beginning with 65% in the first grade textbook illustrations and rising to 82% by grade 6;
- The textbooks in Zambia showed male dominance where male characters were numerically overrepresented;
- In Norway it is documented that when people were to be portrayed, male characters were used. Pictures of girls were shown in stereotypical situations when electric hairdryers and bathroom scales were shown. There was also a clear tendency to show men being in the majority in sports activities;
- Mathematics and Science textbooks used in France featured more boys in illustrations; and
- In Kuwait women and girls were almost absent in textbooks used in different subjects in schools. For example, an analysis of Arabic language textbooks for six to seven year olds showed that out of the 56 illustrations, 76% featured boys, 11.5% girls and 12.5% featured girls and boys together. It was noted that in the few occasions where the few women were shown, their images, like those of males, were strongly stereotyped.

In the Commonwealth study (Davies 1995), the lopsided presentation of characters in terms of the number of appearance that favoured male characters was also noted in most countries where the study was carried out. The only exception was in the Caribbean countries (Davies

1995), where the findings revealed that altogether the representation of female and male characters in the textbooks was fair in the frequency of appearances, the content was biased. More females were depicted in domestic situations. Furthermore, the findings depicted women in decorative clothing and more men in functional clothing.

A study by Gupta and Su Yin (1990) which observed the presentation of female and male characters in English language textbooks used in Singapore primary schools, found out that males accounted for 71% of all characters (human and non-human), and also males spoke more than females. In addition males tended to control topics and interrupted more successfully than females did in speaking.

2.3.4 Findings from comparative studies on frequency of appearance of characters

Comparative studies have been conducted to find out whether or not there were any changes overtime on the depiction of frequencies determining if there were changes over time (Clarkson 1993, Koza 1994 and Witt 1997). Purcell and Stewart (1990) cited by Witt (1999) replicated an earlier study by Women on Words and Images (1972). While the findings of the 1972 which examined 15 major reading schemes showed that 75% of the characters were males, findings from the replicated study indicated more equitable portrayals of males and females, the number of characters being almost equal.

Another study that was comparative in nature was on mathematics textbooks in Australia (Clarkson 1993). The comparative findings by Clarkson (1993) with the findings from earlier studies (in the 1970's) by a number of researchers indicated a narrower gap in the frequency of appearance between male and female characters. While researchers in the 1970s found out that readers had sex bias, with males being mentioned 2 to 4 times more often than females (Schewaz 1977 cited by Clarkson 1993), this was not so in studies carried out in the 1980's. Compared to previous studies, the findings by Clarkson (1993) showed that there seemed to be an improvement towards writing gender sensitive textbooks. For example, the overall, 45% of the people portrayed in texts were males in comparison to 39% females. The residue percentage (16%) were people whose gender could not easily be determined. This indicates that writers and publishers were responding to the demands of gender balance and that the process of change was underway. However gender balance had

not been reached and this prompted Clarkson (1993) to recommend that the pressure to write gender sensitive textbooks needed to be continued.

While the comparative study by Clarkson (1993) indicated positive results, this was not the case with a similar study by Graeber in 1972 (cited by Koza 1994). The conclusion drawn from the findings was that textbooks from the recent period did not yet approach reality in terms of gender balance but were far from it in some ways. Boys continued to predominate where 75% of the main characters were males as were 67.5% of the illustrated characters.

2.3.5 Concluding remarks on the findings of appearance of characters

Apart from the findings of the Ukraine study (Michel 1986), that in the Caribbean countries, (Davies 1995) and that of Clarkson (1993) conducted in Australia and that cited by Koza (1994) in the USA, the rest of the findings covered in the literature review indicate no gender balance in the depiction of frequency of characters. In a nutshell, the following findings have been noted:

- More males than females were presented in illustrations and in the text;
- Where females did appear they were usually insignificant or inconspicuous;
- More male heroes featured in reading schemes;
- In stories, the majority of children's books were written about boys;
- There were books without any females but none without males; and
- No book had more girls featured in it than boys.

2.4 Portrayal of Occupational, Social and Political Activities

2.4.1 Introduction

This section of literature review discusses the depiction of textbooks characters in relation to reproductive, productive, social and political tasks. It reviews the portrayal of activities in relation to domestic/family roles, work/employment patterns including professional activities and socio-political roles. It also portrays women characters as perpetual workers in carrying out reproductive and productive roles and compares the contribution of male and female characters in performing activities for the well being of the family. In this section also discussed is the portrayal of occupational activities outside the home which depicts of gender stereotyping in pegging economic and employment activities to males and females. Discussed also in this section is how political and social activities of the characters are

described. Based on the findings, the depiction, which is gender-biased, is also shown. Last but not least the section discusses the trend of remuneration and non-remuneration of the depicted activities.

Some of the questions posed and which have led the discussion of this part of the literature review include:

- Have the characters been shown involved in a number of activities?
- Has fairness been achieved through gender balance in reproductive, productive, social and political roles?
- Is the portrayal of the characters depicted in a stereotypical or negative manner? and
- Have the male and female characters in the text and illustrations been depicted in a realistic manner and not in exaggerated situations?

The depiction of reproductive, productive, social and political activities that are gender stereotyped has negative effects on the users of such textbooks. While the negative effects to learners will be discussed in chapter three, the following discussion presents the findings on the depiction of reproductive and productive activities.

2.4.2 Domestic activities carried out at family level

The depiction of gender stereotypes in textbooks in relation to family and domestic roles can be manifested in both the content of texts and illustrations; it shows such tasks as being the domain of women and girl characters alone. Men and boys are systematically excused from them. Examples of domestic tasks performed in the home include housekeeping activities that involve cleaning (dusting, sweeping and polishing) sewing, as well as cooking and related activities of shopping and food preparation. For developing countries, the tasks of water carrying and firewood gathering are also included as domestic activities (Obura 1991). Also included as domestic tasks in the family is caring for husbands and children, nursing them at times of sickness, clothes' mending and washing (Davies 1995 and Obura 1991).

The depiction of family roles of textbook characters has been shown by findings from different studies surveyed (Biraimah 1988, Charlotte 1976, Kelly 1996, Deliyanni-Kouimtzi 1992, Korea Working Women Network 1997, Koza 1994, Michel 1986, Obura 1991 and Sprague, undated). In depicting male and female characters, a stereotyped pegging of roles was displayed. In a study by Kelly and Nihlen (1996), the findings showed that women

were portrayed doing household activities such as cooking dinner. The male (father) character, on the other hand was shown sitting on an easy chair smoking his pipe and reading a newspaper. The Korean Working Women Network (1997) has also noted the stereotyping of domestic roles to women characters. The findings have indicated that textbooks portrayed the mother as the housewife who always stayed at home. The father on the other hand was portrayed as the head of the household who had a job and participated in different activities in a broader society.

In most studies, the findings show sharp gender differentiation in the portrayal of activities carried out by female and male characters. In a study carried out by Shone, Van Stean and Vijherizen (1975) on books used in the Netherlands primary schools, the findings indicated a strongly conventional image of activities of men and women. Women were shown in the home caring for their husbands and children. Men on the other hand were shown in occupations and lives outside the family. The findings that showed the locus of performing activities by female characters being in the home and male characters outside the home were also noted in other studies. The findings of a study by Jacklin et al (1973) cited by Koza (1994), on elementary school books in North America indicated that more females than males spent much time indoors. The researcher commented that in the 1960s these were the common assumptions about the appropriate roles and places for females to operate from when performing activities.

Furthermore the findings by Obura in Kenya (1991) covering textbooks in English showed overlapping roles of women as housewife and mother. Women were depicted working exclusively in the home, whereas, men did not work in the home but were portrayed as builders and farmers whose activities were carried out of the house. In the Home Economics textbook examined, for example, the roles of female characters in text and illustrations were summarized as mother, child minder, clothes' mender, and a nurse in the house in times of sickness, and worker in the house, particularly in the kitchen.

In longitudinal studies by Potter (1977) and Tick (1983) cited by Koza (1994), the findings indicated that females were over represented as homemakers. Examining music textbooks in the USA, the findings by Tick (1983) cited by Koza (1994) indicated that the appropriate arena for women was the home and not the public. Performing music in public by women

was indecent and vain. Women were thus discouraged from gaining public recognition for their musical talents and achievements.

Michel (1986) and Koza (1994) have indicated that the depicted women characters are confined to the home. According to Michel (1986), texts and illustrations in Arab states describe women as confined to the house and that the only careers open to them outside the house were extensions of their household duties such as nursing and teaching. A longitudinal study by Lumpkin et al (1984), cited by Koza (1994) indicated evidence of women being programmed to remain at home fulfilling a full-time mother's role.

The findings of the UNESCO study of textbooks from Quebec in Canada (Michel 1986) conclude the depiction trend of performance of textbook characters in domestic activities in most of the findings of the studies surveyed. The findings from Quebec indicate that women and girls performed 85% of the household chores, whereas men and boys performed 15% of these chores. When cooking was added to these household activities the percentage changed to 77% of the tasks performed by women and 23% by men.

Findings by different researchers have shown that women have been depicted as perpetual workers. They are shown busy performing different activities in the domestic environment (Deliyanni-Kouimtzi 1992 and Obura 1991). Deliyanni-Kouimtzi (1992) carried out a study on Greek school reading materials and found out that apart from the stereotyped distribution of roles and activities in the traditional organization of the family, women were presented as limited to roles and duties determined by being wife, mother and housewife. Noting such roles and duties, Obura (1991) found out that the Kenyan textbooks showed that women had no time to rest or had no leisure. A woman woke up early in the morning to cook the children's breakfast, cooked lunch and dinner, washed clothes, swept, mended clothes, served the family at supper time and when at last she sat down to eat she was with a baby on her lap to feed. While she was depicted at most times carrying out activities related to the kitchen, the woman was also shown assisting men in constructing houses and often carrying loads.

Male characters on the other hand were depicted as aiding in domestic activities. Of the surveyed literature, findings from studies by Gupta and Su Yin (1990) on the depiction of characters carrying out domestic activities deviated slightly from most of the already

surveyed literature. The findings on the depiction of non-economic roles of characters in English textbooks showed that there was less sharp gender differentiation in carrying out the domestic roles. Males and females were both portrayed carrying out domestic roles and childcare. According to the researchers of the study, the findings showed that the role of males in carrying out domestic activities were at best auxiliary (aiding). Men tended to help their wives by shopping and looking after a baby while the mother was busy.

The findings by Davies (1995) on textbooks in the Caribbean Commonwealth countries indicated gender bias against females. Female characters were not only shown less in “man’s world” (outside the home) but also on what prevailed in real life situation. Men were also shown more often in “women’s world” than real life. Males were for example, over represented in carrying out domestic roles. Citing study findings by Carrington (1987) and King and Mossy (1988), Davies (1995) indicated that women were presented as being of diminished importance when compared to the prevailing real life situations. Women in this case were portrayed in passive and subordinate roles with interests centered on the family.

2.4.3 Contribution of characters in performing activities for family well-being

This sub-category concerns a discussion on the findings on the roles of male and female characters in carrying out activities for the family welfare. It examines the depiction of adult-child relationships in upbringing and induction of children into societal roles. The frequency and nature of the portrayal of the interactions between adult characters and children at the home environment is also discussed. The general trend drawn from the findings of the different studies surveyed shows that the upbringing and interaction between adults and children were stereotyped. More women than men for example, were depicted to have more contact with children and that women characters, especially the mothers, were assigned a monopoly in the care of young children (Michel 1986).

The findings of the UNESCO study (Michel 1986) on textbooks used in Quebec, depicts women were as attending to the mutual and emotional well-being of children in terms of feeding, washing, dressing, encouraging, reassuring and comforting. Men, on the other hand, were shown in roles of authority by answering children’s questions, introducing children to new things and helping them to solve problems. The findings in the same UNESCO study in Peru indicated the portrayal of women in the home doing such activities

as washing, cooking and taking care of children. Men, on other hand were depicted as relaxing or helping children with their homework (Michel 1986).

The study by Obura (1991) on Kenyan textbooks indicated that the mother was a central family member in carrying out household roles and in nurturing children. The emphasis on these textbooks however, is on physical activities rather than the important activities carried out by women. In order to cope with the different activities, women were shown performing activities at home and those outside the home, and in order for them to cope with the different activities with time limitations they had to possess skills that would enable them to budget their time in order to perform such tasks properly and successfully. These abilities are however, not emphasized in textbooks.

Of the surveyed literature, two Kiswahili textbooks for standards one and two in Kenya are commended for being gender sensitive. They depict female characters assisting a son in schoolwork during the evening (Obura 1991). According to the researcher, this depiction is a positive welcome change from the traditional practice where children are always seeking advice from the father on school matters.

As regards to father's contribution to the family welfare, the two Kiswahili textbooks studied by Obura (1991) are cited. The father is shown at home not just eating but in one instance, spending his leisure time happily at home reading. The researcher commends the father for being a role model by showing parental example of reading for pleasure, not just reading a newspaper. One could argue that were the mother not busy with household chores she would also be a role model in reading for pleasure. One can also speculate that the involvement of girls in helping the mother to carry out household chores would not benefit the girl for modeling the father in reading. It was the boys who were not as busy as girls who would imitate fathers.

The depiction of fathers playing lesser or no roles at the family level in activities that are beneficial to family members is documented in the surveyed studies (Michel 1986, Obura 1991 and Sugino 1998). According to Obura (1991) fathers were absent from the home unless it was mealtime, when they were served by their wives. The father was never portrayed as holding the baby, nor conversing with his wife and children. The home for the father was depicted as a comfort, but it was not depicted as a forum for him to interact fully

with the family. Sugino (1998) also came up with findings like those by Obura in the Kenyan textbooks that mothers had greater responsibilities at home. In her study with Japanese and American textbooks, the findings indicated that fathers were not much in evidence in the home. She noted that the depicted fathers in the Japanese and American textbooks played minor roles in family affairs.

In the literature surveyed, it is noted that parents induct their children into future stereotyped roles. Examples have been given that mothers kept their daughters at home during the holidays, teaching them assistance and submission through routine washing up tasks and sweeping. The father on the other hand, gave his son a plot of land, which was away from the home. The boy was also given the opportunity to plant, harvest and later sold the produce from the farm (Obura 1991).

The findings also show that when boys were depicted being involved in domestic chores by helping mothers, they collected rubbish outside the house, while their sisters were inside the house sweeping. The boys were also depicted doing shopping, which is said to be an onerous and most enjoyable kind of chore. Shopping permits the child to go away from the home and interact with outsiders. The study by Michel (1986) on Quebec textbooks (1986) indicated that 2/3 of the children associated with the home were girls anticipating to take up adult 'feminine' household roles.

2.4.4 The portrayal of productive roles

In tracing the portrayal of productive roles in textbooks the pegging of economic employment and professional tasks to textbooks has been looked into. There are various ways in which gender stereotypes in textbooks in relation to economic employment and professional activities can be determined. Different researchers have pointed out elements that portray gender-stereotyped textbooks in relation to reproductive roles (Biraimah 1988, Davies 1995, Deliyanni- Kouimtzi 1992, Koza 1994 Michel 1986, Obura 1991 and Sprague undated). The researchers have identified patterns of gender role differentiation embodied in textbooks. The general trend on the portrayal of productive roles of male and female characters has been differentiated. Such differentiation is in terms of the frequency of the pegging of male and female activities and also how the kind of reproductive roles they have been pegged to.

2.4.5 Pegging more occupations to male than female characters

The general trend on the findings of the UNESCO study (Michel 1986) in all countries indicates the pegging of occupational and career activities in favour of male characters. The roles assigned to female characters are more restricted and less varied (Michel 1986). In contrast, males are shown in a wide range of occupations while female characters appear in fewer and less diverse roles. In France, for example, women were seldom, if ever, mentioned. If they were ever mentioned and shown in textbooks, they were depicted as having no career. Men, on the other hand, were portrayed as having options to choose from different types of occupations (meteorological, roofer, mason, tile layer, runner and surveyor). In Peru the findings from primary school textbooks indicated that male characters dominated the occupations. For example, of the 104 occupations mentioned, only eight were described as women's work while 78 were described as men's work, with 17 deemed appropriate for both men and women.

The findings of different studies on the description of male and female characters have ratios and percentages that are lopsided in favour of male characters. The ratios and percentages of activities depicted in textbooks showed that there were more masculine character activities than female ones. Men were depicted in a wide range of occupations. The findings below illustrate the case in point:

- Biraimah (1988) study on West Africa Secondary school textbooks indicated male characters being depicted three times as often as females in job related activities;
- The findings by Foley and Boulware (1990) on middle school basal readers in Western Kentucky in the USA indicated that males were shown six times more in different careers and occupations compared to female characters;
- The findings cited by Sprague (n.d) indicated that:
 - In a study done in Australia there was a mention of 103 occupations pegged to males as compared to 19 occupations pegged to female characters (cited from Bradley and Mortiner 1973), and
 - A study that examined textbooks in Scottish schools found out that only 25 possible careers for girls were indicated in comparison with 105 possible careers for boys;
- The findings of a UNESCO study in Ukraine (Michel 1986) indicated the stereotyping of men's importance and dominance in occupations. This was revealed with reference to the percentages of women pegged to occupations when compared to those of men. The

percentage was 38.3 to 61.7 respectively. Michel (1986) cited a study that examined 134 textbooks used in New Jersey State in the USA. The findings revealed that male characters were portrayed as having access to 147 different occupations, whereas women had been depicted to have an access to only 25 occupations.

Apart from the findings showing male characters being depicted in more careers and professions, the fewer roles pegged to women characters for most part have been in the traditional domains as is shown in the following section.

2.4.6 Allocation of occupational roles according to traditional domains

Characters are assigned to traditional roles which are stereotyped. There is a stereotyped emphasis of family and occupational roles associated with females (Delinniya-Kouimutzi 1992). The findings from different studies on textbooks have indicated a trend that shows occupational roles being confined to traditional domains (Biraimah 1988, Michel 1986 and Obura 1991). According to Biraimah (1988), the fewer professional roles allocated to women characters for most parts were within the traditional domains of a nurse, queen, market vendor/worker, cottage industry worker, skilled trades worker in weaving and hairdressing, flight attendant (airhostess) and child parenting. The findings by Obura (1991) and UNESCO study in Ukraine point to the same direction. In the Kenyan textbooks for example female characters were depicted as engaging in traditional areas of petty trading, nursing, teaching and typing (Obura 1991). Textbooks examined in the Ukraine study indicated that women were housekeepers, nurses and teachers. Men on the other hand were depicted as breadwinners and managers of family budget.

Looking closely at the depiction of women's occupations, it can be noted that the portrayed occupations are usually an extension of household tasks outside the home. Such occupations are laundresses, dressmakers and cooks (Obura 1991). Obura argued that this portrayal tended to ignore reality as no mention was made of women shopkeepers or of women artists. Such occupations were shown as reserved for men while this is not the reality. In agricultural related activities, the findings showed that the description of these activities was being a male domain (Davies 1995 and Obura 1991). According to Obura (1991) the central character depicted in agricultural activities was the male farmer who was also the landowner. In geography textbooks around the world (USA, New Zealand, Britain, Argentina, Iran and India) males were depicted as farmers. The findings by Davies (1995) in textbooks used in

some African commonwealth countries concur with those of Obura (1991) where farm labour was represented as a male domain.

The findings that agricultural activities are a male domain do not depict the real prevailing situation (Davies 1995 and Obura 1991). The visual impressions as depicted in illustrations in geography textbooks fail to reflect the day-to-day reality in Africa and the world over. Women perform significant economic activities in agriculture. According to Davies (1995) women in Africa do the bulk of farm labour. The problem was that the textbooks, according to Obura (1991), emphasised the importance of cash crops. Such a presentation was also done despite the recognition by third world governments of the uncertainty of cash crops in the world market and especially of the unequal international trade between industrialised countries and countries of the third world. The textbooks failed to stress the importance of food and subsistence farming. The product of subsistence farming is important for nutrition and survival of family members.

There is an unrealistic pegging of the activities compared to the prevailing situation in a given society. A closer look into the carrying out of agricultural activities shows that in real life situation these activities are in most cases done by women, although the portrayal in textbooks makes it a male domain. Men sometimes migrate to other places away from the farm to take up different types of jobs else where. Women in this case have to manage the farm with the required technical skills. In contrast, the textbooks, if and when woman's involvement was acknowledged, show her cultivating a small garden, growing only food crops and vegetables for home consumption and petty market trading. There were neither large-scale farmers nor traders of coffee, cattle, businesswomen, headmistresses and leaders among women (Obura 1991). To make matters worse, the findings gave the impression that women do not grow enough food to adequately support the family. This was evidenced in textbooks where the husband has always to provide money to supplement food supplies.

2.4.7 The portrayal of political and social activities

The review of literature on the depiction of social and political activities to male and female characters, the findings from different studies (Biraimah 1988, Charlotte 1976, Michel 1986 Obura 1991 and Sugino 1988) indicated that there was gender bias in the portrayal of male and female textbook characters in political and social roles. The pegging in the political and

social roles was differentiated between male and female characters. The political and social activities were rigidly divided into either masculine or feminine. This depiction pertains to:

- Patterns of ownership of goods and property by male and female characters;
- Holding of leadership roles by males and females, hence those in leadership positions and followers; and
- Ownership of information power by male and female characters from a gender perspective.

Male characters were depicted as decision-makers inside and outside the home (Michel 1986 and Obura 1991). They were portrayed in decision-making positions as Members of Parliament, managers, judges and as leaders in different spheres in the society (Obura 1991). In the UNESCO study (Michel 1986) male characters were not only depicted as heads of the household in the family, but also as controllers of family budget.

Indications of sexist stereotypes are the pegging of virtually all-political and social roles to male characters, something which does not match with reality. The prevailing situation indicates that today as was in the past, women perform political and social functions that require responsibility, authority and a spirit of initiative. There are several ways that can be used to determine biased depiction of social and political roles to female and male characters.

While women were for example, portrayed as community and social workers, men were depicted as community and political leaders. The problem that was noted by Sugino (1998) of such biased and stereotyped depiction in Japanese and America textbooks, was that women despite playing important social and political roles were not fully portrayed and when they were presented, they were undervalued. According to Charlotte (1976) while adult women were shown as housewives, there were other dimensions of roles played by women in the community that were not depicted. For example, females in leadership positions in the community are not frequently portrayed in such positions in the textbooks.

According to Obura (1991) the social and political roles can also be reviewed from the portrayal of ownership patterns of goods and property pegged to male and female characters. The findings on ownership patterns portrayed in science, mathematics and language

textbooks in Kenya indicated that male characters owned modern houses, big land and cars. Women on the other hand were not portrayed as possessing valuable property. They were depicted as sharing their workload and housekeeping skills with their daughters. Male characters have therefore been shown to possess more economic power than their female counterparts.

The findings by Obura on Kenyan school textbooks, in terms of male wielding power in leadership positions, tie with the findings by Biraimah (1988) on West African school textbooks. Findings by Biraimah showed that females were not frequently presented in positions of power but were depicted in low hierarchy of occupations. Besides female characters being depicted in low status occupations. Biraimah also noted that women were portrayed as wives, daughters and queens. This depiction had the implications that females were there to serve and be dominated by men. In the domestic sphere females were shown serving other members of the family and that they were involved in tedious, routine activities using low technology. Such depiction indicated the low status of female members in the community. The image created was that of women being a subordinate sub-group, marginal to the society, to national development and scientific activities.

Findings of other researchers such as Gupta and Yin (1990), Korea Women Working Network (1997) and Obura (1991) indicated that males were depicted as possessing information power. They were aware of the world outside the home where they were depicted mostly as carrying out their occupational activities. They worked outside homes and often some distance away from the home. Males were also depicted reading books and newspapers that strengthened the possession of information power. This power was further reinforced through travelling.

Male adults were also depicted as the ones who introduced children to the world beyond the home. Male adults took children to different places like towns and museums. In this way male characters were portrayed as the custodians of the national heritage and giving children information on history. Lack of information power among women characters could be attributed to women lacking leisure time compared to fathers who read in the evening, while the mother was involved in household chores.

The depictions in social and political roles of textbook characters also showed that male characters interacted more with the wider community, earned and possessed more money, drove cars and were involved in decision-making processes. This situation made them participate fully as active members at community, national and international levels in the social and political arena. When the portrayal was compared to female characters (with the exception of women teachers being depicted in textbooks), women were tied to the domestic sphere, a situation that did not give them time to participate in body politic (Obura 1991).

As women characters were portrayed being perpetually engaged in carrying out different household chores and those outside the home, they did not have leisure time. In order to accomplish such activities, one had to be good at time management. It can be noted however, that this ability to manage time by female characters to accomplish the tasks, was not better addressed in textbooks. The management skills involved in taking care of children and other family members and housework were not given prominence in the textbooks. The end result was skewing the socio-political image of women in the society and giving prominence to men.

2.4.8 The depiction of women characters as backward

As a result of the negative and stereotyped portrayal of women, textbooks in different spheres projected the women as being backward. For example, in the transport sphere women were depicted walking and carrying loads while men are shown cycling, driving cars and motor vehicles. Women were associated with menial tasks, traditional and even backward activities such as patching mud houses for no pay (Obura 1991). While men were associated with modernity, industrialization and progress a majority of the occupations, as it has been noted, were described in the manner of being exclusively a male domain.

Researchers have noted the strangeness, which has repeatedly been observed, that women have not been sufficiently depicted in the fields of work outside the home. When for example, the women's agricultural output was depicted; they were involved in subsistence farming (Davies 1995 and Obura 1991). When the portrayal was compared to men in agricultural activities men were shown to derive more from large tracks of the land they owned. Such portrayal of women's involvement in agriculture did not depict the African women's real contribution to the development of the society. The picture was traditionally

distorted as women in Africa are the main agricultural producers (Davies 1995 and Obura 1991).

2.4.9 The portrayal of unremunerated activities

In most cases the noted activities carried out by women characters in the home and outside the home were shown to be unremunerated. These activities were also not considered as important labor. The activities that women pursued in the different situations that were not remunerated fall under the reproductive and productive spheres. Most of the kitchen work, which involves cooking and food serving at the home, was unpaid labor (The Korean Women Working Group 1997, Kelly 1996 and Obura 1991). Findings have for example, shown that female adults were often shown as mothers and more often in unremunerated, supportive and quiescent roles in language textbooks in the Kenyan study (Obura 1991).

The activities that relate to marriage and having children and the accompanying tasks were not portrayed as important. Sometimes such activities were treated as invisible as they were not depicted in textbooks. According to Kelly (1996) the few women who were depicted working outside the home for a wage were not shown in activities related to marriage or having children. It should be noted however, that both reproductive and productive roles are important for the well being of both males and females in the family, and the existence of the society. Charlotte (1976) noted this depiction, which revealed the invisibility of the labor of female characters.

The portrayal of unremunerated and invisible women labor has also been noted in the agricultural sphere. The example from Social Studies textbooks in Kenya showed that while both male and female characters participated in farm activities at Mwea rice farm, it was the men who were depicted as collecting the cash after selling rice from the farm (Obura 1991). Women were therefore, not paid for what they produced. The implication was that payment accrued from farming went directly to men regardless of women's participation. Such a situation, according to the researcher, served to perpetuate the notion that women workers were not an integral part of the nation's work force and that it was natural not to remunerate women.

The case of unremunerated labor and the issue of altruism can also be exemplified from Home Economics textbook surveyed in Kenyan study (Obura 1991). The findings from

these textbooks show that women characters were portrayed as living for others (being altruistic) while men lived for themselves. Male adult characters were portrayed doing physical exercises in order to keep fit physically. In contrast health improvement for women as depicted in textbooks was always related to childcare and child hygiene. The improvement of mother's health was done in order to ensure that the health well being of children and other members of the family including the father.

2.5 The Portrayal of Personality Traits of Textbook Characters

2.5.1 Introduction

In this section, the findings of past researches on the depiction of personality traits among male and female characters have been covered. In order to understand the past findings several concepts that relate to personality traits and gender are briefly discussed. A typology of personality traits that is used as a basis for the discussion of past findings is shown (Basow 1993). The typology is coupled with discerning major areas of personality traits and behaviors. The importance of validating personality traits into feminine, masculine and androgyny in investigating gender roles in textbooks has also been discussed. An example of an inventory of gender role is given. The past research findings are discussed and conclusions are drawn on the basis of the presented past findings.

2.5.2 Discussion of concepts related to personality traits

Historically, the concept of masculinity and femininity in relation to personality traits has been categorically differentiated. Men have been considered 'masculine' while women are 'feminine'. According to the Oxford English Dictionary (1998) 'masculine' and 'feminine' are adjectives used to describe the behaviour and appearance which people think as normal or acceptable for each of the sexes. It has been argued that the thinking that personality traits are rigidly divided into masculine and feminine areas does not always apply in all cases (Basow 1993 and UNESCO 1992).

According to UNESCO (1992), for example, today it is recognized that men and women demonstrate some of the personality traits that had formerly been considered as belonging exclusively to the opposite sex. People however differ in the degree to which they possess personality traits stereotyped as gender appropriate. In clarifying the fact that personality

traits are not specific to a particular gender, Basow (1993), Obura (1991) and UNESCO (1992), among others have discussed this proposition.

According to UNESCO (1992) a discussion of masculinity and femininity in society should acknowledge that male and female roles are in the state of transition due to the socialization process that is going on. According to Obura (1991) the differences in the depiction of personality traits have mostly been determined by the socialization process, which affects the development of “feminine”, and “masculine” personality traits. The distinction between masculine and feminine behaviours and personality traits is thus not as clearly pronounced as it was two decades before (UNESCO 1992). Masculinity and femininity therefore, should be considered as opposite ends of a continuum. There are many men who do not have what are regarded as typically masculine personality traits, while they may possess feminine traits. Likewise many women have what are considered to be predominantly “feminine” personality traits along with some typically masculine traits.

In many societies for example, boys and girls are treated differently from the time they are born. In most societies girls receive more attention and physical contact, are talked to more, protected more and have more restrictions placed on them. This is not the case with boys. Boys enjoy more independence and more achievement demands (Obura 1991). According to Obura, boys receive more warnings and admonitions than girls for impetuous and ill-considered behaviours. At the end of the day, such treatment makes boys become more successful in most of their endeavours. This success can be attributed to either the boy’s own ingenuity or through advice and assistance from adults. The message conveyed to boys is self-assurance and eagerness to experience and do. These are considered to be cornerstone for growth and development. Boys are ultimately equipped with knowledge and skills to achieve the outcome they desire.

2.5.3 Typology of personality traits

As it has been discussed above, all along personality traits have been viewed as stereotypically masculine and feminine. According to Basow (1993), stereotypical feminine traits are nurturant-expressive traits, which include understanding, compassion and affection. Females are for example, seen as emotional, nurturant, dependent, submissive, talkative and aware of the feelings of others. Stereotypical masculine traits are active instrumental traits

such as assertiveness, self-reliance and independence. Males are perceived as non-emotional, dominating, independent, and aggressive.

It is important to recognize that there are tremendous ranges of individual differences in the area of personality and social behaviour. There are thus no clear-cut differences between males and females. Such differences are difficult to find and cannot be used to effectively predict individual performance. The non-predictability of pegging of personality traits to an individual has led to the development of a typology system into four personality types rather than relying on the two groupings of femininity and masculinity. According to Basow (1993) the four personality types include people who are:

- “Masculine” active – instrumental sex-typed individuals;
- “Feminine” nurturant – expressive sex-typed individuals;
- Androgynous individuals; and
- Undifferentiated individuals.

2.5.3.1 A brief discussion of each type

Basow (1993) has discussed each of the four descriptions of the personality trait groupings as follows:

- “Masculine” active – instrumental sex-typed individuals are more agentic by being more aggressive, dominating (both behaviourally and communicatively), competitive and non-conforming;
- “Feminine” nurturant – expressive individuals are seen as emotional, submissive, talkative, aware of others’ feelings, understanding, compassionate and affectionate towards others. They tend to be more communal, more expressive, friendly, emphatic, nurturant and agreeable;
- Androgynous individuals possess personality traits from both the “masculine” active-instrumental and “feminine” nurturing-expressive types. Androgynous individuals therefore, differ from masculine sex-typed people who are high on the active-instrumental traits and low on nurturant-expressive. These individuals are also different from feminine sex-typed people who are high on nurturant-expressive traits and low on instrumental- active traits; and
- Undifferentiated individuals are those people who have low personality traits on both sets of active instrumental and nurturant-expressive traits.

2.5.3.2 The importance of the above typology on personality traits

One virtue of the fourfold typology is that it separates biological sex from psychological sex typing. According to Grabble et al (1985) cited by Obura (1991) sexism designates categories of people based exclusively on biological differences. The differences are then used to explain and determine major personality traits of males and females as two categories of people. The aptitudes and potentials of each sex, and categorization of people into females and males, are then determined on this basis.

According to Basow's categorization above, any person can be masculine-sex typed, feminine sex typed, androgynous or undifferentiated. The typology describes the degree of flexibility a person can be as regards to gender stereotypic behaviour. It is thus urged that the complexity on the portrayal of personality characteristics of an individual would very much depend on a specific situation (situational factors), differential learning opportunities, societal rewards or the differences in personality. Basow (1993) gives an example of an androgynous individual who can show different behaviours depending on the situation. An individual may be:

- An emphatic listener when a friend has a problem;
- An assertive leader propelling a group to action; and
- An assertive leader and sensitive boss when an employee needs to be fired.

It is important to recognize the tremendous range of individual differences in the areas of personality and social behaviour. Such differences overshadow any gender – based ones. Clear-cut differences between males and females are thus difficult to find and have little use in predicting personality traits of an individual. There are thus neither absolutely “masculine” active-instrumental sex-typed or absolutely feminine nurturant females.

2.5.4 Major areas of personality traits

In discussing the findings of past research in describing personality traits of characters in textbooks, four major areas of behaviours have been considered (Basow 1993). The four major areas and the accompanying personality traits are:

- Personality and temperament;
- Verbal and non-verbal communication patterns;

- Pro-social behaviours which include affiliation, empathy, nurturance, altruism and morality; and
- Power related behaviours, which include aggressiveness (physiological and social), assertiveness, dominance in terms of leadership and intimate relationship, competitiveness and gender appropriate achievements.

The above four major areas of behaviour do overlap specifically in the prosocial and power distinction. Pro-social and power distinction parallels personality theories of Bass and Finn (1987) cited by Basow (1993) with the stereotypical views that:

- Women are more interpersonal; and
- Men are more agentic or active.

Males tend to be rated or rate themselves significantly higher than females on instrumental – active traits. These differences have been quite stable despite societal changes over the last 30 years (Baldwin 1984, Galombos, Almeida and Petersen 1990 cited by Basow 1993). It should be noted however, that research does suggest that gender differences with respect to instrumental active traits are decreasing (Gill, Johnson, Stokard and Williams 1987, Suel 1989 cited by Basow 1993).

2.5.5 Validation of personality traits

Several researchers (including Basow 1993, Koza 1994, Sprague n.d, UNESCO 1992 and Witt 1999) have indicated that it is unlikely that personality traits are completely innate for females and males. This is because the possession of personality traits differs from one individual to another and from one culture to another. For instance, in some cultures women are aggressive and dominant while men are the ones who are emotional and sensitive (Basow 1993 and UNESCO 1992).

This situation has led to researchers to validate personality traits by classifying them into traditional female personality characteristics and traditional male characteristics. This is done when a researcher wants to determine the portrayal of personality traits in a given environment. This validation of personality traits has been done in order to minimize the researcher's gender bias (Palmquist 1993 and Witt 1997). It is in this light that inventories of personality traits have been developed. Bem (1984) cited by Witt (1997:3) has developed

what is known as the Bem Sex *Role* Inventory (BSRI). The BSRI was developed as a means of determining levels of masculinity, femininity and androgyny of personality traits.

Researching on the depiction of personality traits of characters in basal readers, Witt (1997) compiled a master list of behaviours exhibited by all characters in the readers. Three individuals were selected to determine whether the behaviours identified from the readers would be classified as masculine or feminine. This behaviour list made it possible to determine the number of masculine and feminine personality traits. In this study, Witt (1997) found out that 567 characters exhibited 5,147 behaviours. The three individuals rated these behaviours. There was an agreement among the raters as to masculinity and femininity on all but seven behaviours. The instrument used to determine masculine and feminine traits of characters was adopted from Bem Sex Role Inventory (BSRI). Tables 2 and 3 are lists of what are considered as masculine and feminine traits according to BSRI (Witt 1997).

Table 2.1: Feminine traits that tend to be associated with females

Yielding	Gentle	Childlike
Shy	Understanding	Loves children
Flatterable	Cheerful	Feminine
Sympathetic	Affectionate	Compassionate
Soothes hearts	Loyal	Gullible
Warm	Sensitive	Tender
Doesn't use harsh language	Soft-spoken	

Table 2.2: Masculine traits that tend to be associated with males

Self-reliant	Analytical
Independent	Takes risks
Strong personality	Self-sufficient
Forceful	Takes a stand
Leadership	Competitive
Decisive	Leads others
Dominant	Masculine
Aggressive	Assertive
Individualistic	Defends belief
Ambitious	Athletic

2.5.6 Findings on the pegging of personality traits

Different researchers have investigated the portrayal of personality traits in textbooks as one of the research categories in examining gender bias and sexism in textbooks. The researchers

include Biraimah (1988), Charlotte (1974), Clarkson (1993), Davies (1995), Deliyanni-Koumutzi (1984), Gupta and Su Yin (1990), Koza (1994) Michel (1986) Obura (1991) Sprague (n.d.), Sugino (1998) and Witt (1997). Most of these researchers have done an intensive literature review using secondary data in their studies and have involved textbooks used in different countries covering different subjects (Davies 1995, Michel 1986) and covering textbooks in different subjects. Other researchers have examined personality traits in several or one subject in one country at a given level of education (Charlotte 1976; Clarkson 1993; Deliyanni-Koumutzi, 1984; Gupta and Su Yin 1990; Koza 1994; Sprague undated; Sugino 1998; and Witt 1997).

In order to understand past research findings investigated on gender roles in textbooks, it is important to understand what a gender biased textbook is in relation to personality traits. According to Brouwer (1984) cited by Koza 1994, gender-biased textbooks are textbooks in which personal traits, abilities and vocations are identified with one gender. The depiction of personality traits is thus differentiated between male and female characters. In the light of the above definition, the following are research findings on the portrayal of personality traits of characters in textbooks.

Michel (1986) in a UNESCO study cited findings from a study carried out in 1982 in seven Arab states (Egypt, Lebanon, Quarter, Saudi Arabia, Tunisia and Yemen) in 79 Arabic textbooks that were currently in use. The findings indicated that women were still represented according to traditional image of being depicted as dependent on men for economic welfare and status (Michel 1986:30). This depiction did not however portray the real situation, as there were Arab women who were actively qualified and possessed personality traits that could enable them to be employed in the most highly qualified professions. Women and little girls were depicted as weak, sensitive, submissive, dependent, self-sacrificing and with no identity of their own as persons. Women functioned as full-time mothers, housekeepers, dutiful wives and obedient daughters. In all the seven countries where the study was carried out, the depiction of personality traits was stereotyped.

In the same UNESCO study (Michel 1986:27), the findings in all the textbooks examined in Norway showed that men and boys were portrayed as more active throughout. In France men were portrayed as strong and muscular while women were first and foremost depicted as mothers who were despised, downtrodden and confined to motherhood. The vast majority

of children's storybooks and school textbooks ignored active women. The ignored women were active not only in bringing up children but also by going out to work. These women had professional responsibilities, a public role to play, and were active in different associations. In science textbooks for example, boys were shown to solve problems correctly and independently. Girls were depicted as incompetent. Men were portrayed as active, while women were depicted as passive.

In the Peruvian study (Michel 1986:29), personality traits were specifically demarcated to each *gender* and were also strongly stereotyped. Men were portrayed as brave, intelligent, patriotic and infused with a spirit of fellowship. Women on the other hand were depicted as obedient and devoted to caring for others.

In the case of this UNESCO study for Zambia, men compared to women were shown as more intelligent, more curious, more inventive and more adventurous. In games, women were portrayed as spectators and idolizers of the agile skills of men in football and other games. The men were shown to be strong, brave and intelligent compared to women who were easily cheated, exploited and beaten by men. Women were followers and had to obey men.

In the Ukrainian UNESCO study, women were shown more often than men were, in possessing positive traits. Unique features were stressed for each gender and these features were differentiated. The personality traits for women characters were depicted as kind, tender, affectionate, loving, trusting, solicitous, sincere, honest, outspoken, friendly, placid, serious, strict, persevering and demanding. Men on the other hand were portrayed as industrious, courageous, resolute, fearless, gallant, truthful, considerate, active, inventive, resourceful, hospitable, sympathetic, wise, and affable. In summarizing the pegging of personality traits in textbooks in the Ukrainian study, Michel (1986:30) noted that there were stereotypes that emphasized personality traits ostensibly to one gender. In this case men were portrayed as efficient, courageous, reasonable and stubborn while women were found with predominance of emotive traits, tenderness and solicitude.

The findings by Gupta and Lee Su Yin (1990) in relation to the depiction of personality traits to characters showed that there was an imbalance of masculine and feminine traits. In expressive traits males tended to speak more than females and males also tended to control topics and interrupt more successfully than females. The study also showed a difference

between female and male authors in depicting traits. Female authors were more likely to write characters that possessed a balance of masculine and feminine traits. Male authors wrote almost exclusively about males and masculine experiences and rarely portrayed males as androgynous.

The findings by Obura (1991) in Kenyan textbooks for Kiswahili, Science, English and other African mother tongue (vernacular) languages indicated gender stereotyping of personality traits. In these textbooks traditionally feminine and masculine personality traits were clearly demarcated. While men were seen as positive, strong and dynamic, women were perceived as negative, weak, passive and even invisible (pg. 7). Data in Table 2.3 and 2.4 indicate the pegging of personality traits to female and male characters as noted by Obura (1991).

Table 2.3: Males' personality traits

Potentially hard working	Initiative and undertake the majority of activities.
Successful	Proactive
Independent	Active
Creative	Alert
Productive	Responsible
Operating away from home	Display their potential
Interact more with outsiders	Sort out problems for girls
Decisive in making up their minds	Adventurous
Make successful plans	Intelligent
Active participants in world beyond the home (the physical drive, freedom, eagerness, curiosity, make boys proactive and dominant figures in the text)	

Table 2.4: Females' personality traits

Submit without protest	Emotionally weak
Doing repetitive, dull and unrewarding Tasks at home	Confined and circumscribed by domestic responsibilities
Submissive	Intelligent as boys but not inventive like boys
Passive	Not leaders
Dependent	Reactive
Indecisive and dependent on males in decision-making	Responsive to others' needs
Unable to plan successfully	Help young brothers when ill and unhappy
Not inventive and creative	Dull
Fail to ask many questions	Cautious
Interact less with outsiders	Quiet, tidy and hard-working in domestic scene
Described in terms of physical features	Attention seekers from males
Praised for beauty	

Koza (1994) carried out an intensive literature search on the portrayal of gender roles in middle school music textbooks. One of the categories in the search involved the study of the pegging of personality traits to characters. Koza (1994) on the other hand cited the following findings on the pegging of personality characteristics from secondary data:

- As early as 1946, a study by Child, Potter and Levine, who investigated gender bias in basal readers, already noted that males and females displayed different behaviour and personality characteristics;
- The findings by U'Run (1971) on a study on school readers indicated that while boys were shown as independent problem solvers who took leadership roles, girls were depicted as dependent and subservient;
- In 1972 Weitzman and others studied 18 pre-school picture books. The findings indicated that boys in the pictures were active by being involved in adventures while the girls were depicted as passive and shown indoors either peering through windows or helping with domestic task;
- In 1972 Glabeur's findings showed that boys were portrayed as independent, skilful, active and adventuresome. Girls on the other hand were shown as subservient, passive and concerned with personal appearances and capable of expressing a wider range of emotions. Glabeur however, noted that compared to earlier studies, there were indications that boys were also portrayed slightly passive. Girls on the other hand were described as active;
- In 1972 a conclusion by Frasher and Walker showed that characters exhibited stereotypical characteristics. Fathers held positions of family leadership and fathers were shown outdoors, while mothers were indoors;
- In England a study done in 1973 by Children's Book Group, indicated that only boys had adventures and that the only time girls showed any spirit was when they helped their mothers dust, sweep or polish the house. In 1977 Potter concluded that females were assigned traditionally feminine personality characteristics; and
- In 1989, Thompkins examined whether or not the pegging of personality traits was male or female linked. The findings indicated that the male characters tended to display traditionally male linked personality traits such as independence and willingness to take risks compared to female linked traits such as gentleness and compassion.

The Commonwealth study (Davies 1995) on the portrayal of gender bias in school textbooks in countries from Asia, Africa, Caribbean and Australia also addressed the depiction of

personality traits of the characters in the textbooks analyzed. The findings on the analysis of personality traits and characterization in the textual materials showed the existence of gender bias. In the Caribbean countries surveyed for example, apart from the fact that males and females were variously shown as active and passive, boys were far more often shown to be adventurous and fun loving and getting into trouble than any other group. Women were far more often shown in worried positions, subtle influence over others and in one case complaining perpetually than any other group. Men were shown as competent and in START authority than any other group. Whenever qualities of being unkind, threatening and criminal were shown, they were associated with males.

In the Commonwealth countries of Africa where the study was carried out, the textbooks portrayed females as fearful, inferior, inadequate, troublesome and passive whereas the male characters were portrayed as aggressive, active, inventive and dominating. According to Davies (1995), the portrayal of women through these personality traits in textbooks did not take into consideration the changes that were taking place in the acquisition of personality traits. There were economic changes with the accompanying required personality characteristics, which led women to become heads of households, responsible not only for the traditional tasks but also for providing both food and income for the family.

In Australia, as a model of industrialized Commonwealth countries like Canada and Britain, the findings showed that in 163 basal and supplementary reading books, females displayed passivity, domesticity and romance, while males displayed activity, leadership and risk. An examination of adjectives and verbs that were associated with girls and boys in textbooks showed that girls were represented as being more emotional while boys were physically active and gregarious.

The findings by the Korea Working Women Network (1997) study on the portrayal of gender roles in textbooks showed that men were portrayed as active and willing to assume leadership roles while women were passive and emotional. The mother was a housewife who stayed at home, while the father was presented as the head of the household who has a job and participated in the broader society.

Sprague (n.d) concluded from findings of secondary sources on the depiction of personality traits to female and male textbook characters that females and males were usually portrayed

in stereotypical ways. Girls were portrayed as passive and unadventurous creatures. Boys, on the other hand, were shown to be adventurous and active. It was through textbooks that the acceptable and unacceptable behaviours for males and females were defined. To understand these concluding remarks by Sprague (n.d), some of the studies whose findings have led to these conclusions are shown below:

- As early as 1970s a group of teachers in Sheffield analyzed gender roles in Ladybird Reading Scheme used in primary schools (by then the most popular reading scheme). The findings indicated that the main characters, Peter and his father in almost all situations overwhelmingly took the initiative. The mother and father had entirely different roles in the stories. Children were constantly imitating their parents' behaviour;
- In 1973, Bradley and Mortiner examined the presentation of gender roles stereotyping in children's books in Australia. The books examined were selected from recommended lists of schools' library services in five Australian states. The findings indicated that boys helped others, solved problems of other people, protected the weak, confronted danger and aggression, initiated situations, travelled away from home, earned money and were disobedient;
- Jackline and Title (1973) concluded from the findings of a study they carried out on basal readers that there was evidence of gender stereotyping in the behaviour exhibited by characters in the readers;
- Lobban (1984) reported the existence of sexism in seven reading schemes published in or before 1970 as follows:
 - Male characters tended to be active and instrumental in carrying out activities. These activities were more related to the outside world and outdoors, and
 - Activities carried out by female characters were mostly characterized as being domestic.

The message conveyed from the reported sexism by Lobban was that a woman's place was in the home where she learns "feminine" activities such as cooking and childcare and hence acquired the accompanying personality traits.

Findings from a study by Weitzman and Rizzo (1974) cited Charlotte (1976) who examined biased images of male and female illustrated characters in elementary school textbooks in the USA published between 1967 and 1972 indicated that;

- Boys were portrayed as active while girls were shown as passive;

- Girls were shown experiencing a wide range of emotions while boys projected the strong silent images;
- Girls were portrayed as subservient, passive and concerned with their personal appearance; and
- Boys were depicted as independent, skilful, active and adventurous while girls were portrayed as dependent, unskilful, passive and unadventurous.

The conclusion made from the above findings by Weitzman and Rizzo (1974) was that while boys were actors girls were watchers.

Biraimah (1988) carried out a study with the purpose of exploring patterns of gender role allocation within West African secondary school official textbooks. The findings describing behaviors and personality traits of the characters indicated that for females, the emphasis had been on passivity, emotion and sensitivity. Women were presented as individuals whose personal interests were limited to social gathering and fashions. Male characters on the other hand were portrayed as adventurous, active and willing to take up new challenges. While males were portrayed as future-oriented, females were portrayed as past-oriented. There were also other findings that indicated that personality traits pegged to women explained the evils and unhappiness of the society. For example, in the textbooks analyzed, there were constant themes that showed stupidity and inherently wicked nature by female characters. Such portrayal indicated the dominance of men over women.

The findings by Biraimah (1988) on the pegging of negative personality traits to women can be compared to findings by a study done by Sugino (1998). In her study carried out using Japanese and American children's literature and textbooks, she found that females were portrayed as sickly, handicapped and oftentimes met tragic accidents. The author of the study concluded that the fact that no male character in the examined stories experienced these hardships, such depiction implied that the Japanese society considered females to be the weaker and less fortunate sex.

Both studies by Biraimah and Sugino showed female in victimized roles. Women and girls were always portrayed as victims of poverty, while men and boys were oftentimes shown in roles associated with wealth and productive activities. Other findings by Sugino showed that

male characters were vigorous, mischievous and a bit too rough while female characters were depicted as lenient or gentle.

Commenting on the findings, Sugino noted that although there had been changes in gender roles in the society, stereotypical images and ideas could still be found in textbooks. These images existed because of commonly accepted over-generalization of men and women. Such generalization as cited by Sugino (1998) from Eakins and Eakins (1978) include women being intuitive and emotional while men were characterized as logical, pragmatic, realistic, aggressive, assertive and competitive. These masculine traits were generally regarded as being more desirable than feminine traits.

Clarkson (1993) did a comparative study on mathematics textbooks by comparing findings of researches done in the 1970's. Going through secondary data on the findings of these studies, which focused on the potential of hidden messages that textbooks conveyed to students, the presentation of personality traits showed that boys were depicted as active with girls taking fewer roles that involved planning and initiating activities. The findings by Clarkson (1993) showed females as well as males being presented as active. The researcher however, noted that the balance had not been reached yet. A closer analysis, however, showed that the ratio of active to passive boys was higher than the corresponding ratio of active to passive girls. The differences were not always significant and great.

In view of the typology of personality traits into "masculine" "feminine", androgynous and undifferentiated, the findings have shown that in most cases the traditional pegging of the characters into masculine and feminine sex typing exists. The only surveyed studies, which at least showed personality traits depicted on both sexes, were the UNESCO study in Ukraine (Michel 1986: 30) and that done by Clarkson (1993). In the UNESCO study, for example, both the male and female characters were shown as industrious, serious, strict, persevering and so forth. Such traits are usually associated with "masculine" active instrumental sex-typed individuals. Females and males had both been shown to be considerate, hospitable, and sympathetic, which are personality traits and behaviours that belong to "feminine" nurturant-expressive sex-typed individuals. Being sensitive to the needs of others is strongly linked to expressive-nurturant traits, as females are expected to be more concerned about others and live and act for the good of others (Basow 1993).

While the general trend of pegging personality traits has been into traditional stereotyping of “feminine” and “masculine”, the Ukraine study had indicated the pegging of traits to androgynous individuals. The findings by Clarkson (1993) on mathematics textbooks showed the pegging of characters, which was not towards one dimension. In a comparative study of mathematics textbooks written in 1970s and those written in 1980s, the findings showed that both male and female characters were depicted as active, which was a personality trait associated with masculinity.

There are personality traits that are preferred by human beings. These are positive traits that an ideal male is expected to possess, and are traits that are associated with scientific work. According to Ives (1984) teachers frequently use such traits to show good female and male students especially in learning science. The personality traits are highly demarcated between “feminine” nurturant-expressive sex-typed individuals and “masculine” active-instrumental sex-typed individuals. These demarcated personality traits are found on Table 2.5.

Table 2.5 Personality traits and behaviour pegged to good female and male students

Personality traits and behaviours describing good female students	Personality traits and behaviours describing good male students
Appreciative; conscientious; considerate; co-operative; mannerly; poised; sensitive; dependable; efficient; mature; obliging and thorough.	Active; adventurous; aggressive; assertive; energetic; enterprising; frank; independent and inventive.

According to Walker (1993) this stereotyping of personality traits, where the girls are taken as well behaved pupils, works against them in the classroom. Teachers may unwittingly give more attention to the most aggressive students, who are usually, the boys. Ives (1984) argues that the current imbalance, which leads to the current maleness of science language and presentation of textbooks, has to be addressed and redressed.

2.5.7 Restrictions of personality traits to a narrower range

Looking at the pegging of personality traits to characters, one notices a difference in the pegging of personality traits to males and females respectively. For females, compared to males, the traits are restricted to both the physical and mental sense. For example, while females are associated with the homes in operating their activities, males are involved in different activities away from the home. There are advantages of operating from certain environments as opposed to others. Certain places such as the kitchen may be despised, leading to those who operate from kitchens being assigned a low status (Kabira and Masinjila 1997). It has been observed that the locus where the activities are performed may encourage desirable or undesirable personality traits and behaviours to develop. For example, participation in sports (away from home) may engender more competitive spirit than housework related traits (Basow 1993).

According to Kabira and Masinjila (1997) the locus where the actor operates from is important in determining whether a textbook is gender biased or not. The locus of operation of characters, which leads to assigning personality traits differently by stereotyping, has the implication, for example, for female having limited abilities and potential, compared with the males who are active participants in life.

From the above findings, for example, boys have been encouraged to view a wider range of possibilities for themselves, while girls have been directed towards a much narrower range of possibilities, almost all centred on domestic context. Adult women were assigned roles of mother and wife almost exclusively, while men were found occupied in a wider variety of jobs and activities but rarely in parental roles (Biraimah 1988).

2.5.8 The powerful males and the powerless females

According to Kabira and Masinjila (1997) social gender relations are kept in place by the prevailing power structures that come out clearly in textbooks. Most of the visible power has to do with decision-making and ability to force others to do what the power holder prescribes. Most power will, therefore, reveal itself when it is being exercised. Certain forms of power often follow clearly defined or conventionally understood patterns. According to Basow (1993), in the area of power-centred interactions, males are generally thought to be more proficient than females in possessing power related behaviours.

Interactions, which indicate power, encompass behaviours such as *aggression, dominance, achievement, assertiveness, competition, and non-conformity versus compliance*.

To relate to these behaviours one has to consider different types of power. According to French and Raven (1959) cited in Gender Roles (1997) the forms of power are *reward, coercion, legitimacy, expertise, and information and reference*. The portrayal of stereotyped personality traits can connote the unequal power relationship where one gender is shown to be powerful while the other is depicted as powerless. The personality traits that depict males' superiority give them different forms of power. Male characters have been depicted as having more *reward* power than women. This has been depicted by male characters possessing goods and property and earning money and so forth (Biraimah 1988, Obura 1991 and Sugino 1998). Males are shown to have comparatively greater access to various concrete rewards that they use to make others comply with their wishes.

The fact that male characters are depicted as assertive, fearless, courageous, physically strong, energetic and able to confront danger (Obura 1991 and Sugino 1998) leads them to possess coercive power. This type of power, leads males to use threats and punishments to get their way. Some examples of the use of power can be deduced from different types of violence against women such as wife beating, rapes and Female Genital Mutilation (FGM) (Mukangara and Koda 1997). It has been expressed at some quarters that FGM is not violence by men against women as women, not men, perform the mutilation. Those who argue that FGM is violence against women, point out that while women perform the mutilation, the act is for the benefit of men (Legal and Human Rights Centre-LHRC 2002). Some of the reasons for FGM are:

- Controlling the woman's sexual behaviour so that she remains faithful to the husband;
- Men control the sexual act;
- FGM is hygienically beneficial to men during the sexual act; and
- The belief that if a woman keeps her clitoris then the clitoris will compete with the man's penis.

Again there's punishment by men if this is not done-one cannot get married unless one is circumcised. So again men exercise their power.

The above reasons definitely favour males and do not take into consideration the extent of the physical, psychological and sexual consequences of females who undergo this practice (LHRC 2002). Also because the main reason is to satisfy the males, Mukangara and Koda (1997:57) have pointed out that:

“Much as it is women who sustain FGM, they are performing their socially expected role, so efforts to discourage the practice must reach both men and women”

The fact that males are depicted in textbooks as willing to assume and take leadership positions, they are automatically considered to possess *legitimate* power. Legitimate power depends on the power holder having a socially sanctioned position or role that confers authority over others. Male characters compared to female characters, have been shown to possess abundance of legitimate power because of their access to a variety of leadership positions that sanction their authority over others. Males are depicted as leaders at home and society through the interactive behaviour in the local, national and international community (Koza 1994, Michel 1986, Obura 1991 and Sprague, n.d).

To possess *expert power*, men are depicted in positions that bring with them an amount of expertise or ability. Males, being portrayed as intelligent, skilful, solving problems of other people, wise and independent, possess traits that can be associated with *expert power*. At societal level males are more advantaged in having more education and knowledge compared to females. Even when women show the evidence of possessing expert power, they are likely to be seen by others as less likable and less feminine than men who use this form of power (Brown et al 1996).

In most situations, males, compared to females, have greater access to information desired by others. As a result of this situation men possess *information power*. The depiction of the locus of activities performed by male and female characters and the division of labour in terms of reproductive, productive and community roles that women undertake, disadvantage women in getting access to information. Women have time constraints in acquiring information power, unlike males who have more time to spare in seeking and acquiring information.

2.5.9 Some observations on the findings

From the above findings on the surveyed literature on the pegging of personality traits to textbook characters, the following remarks can be made on the probable perceptions learners using the textbooks might have:

- There are specific and different traits for males and females;
- Male characters are more interesting as they have a wide range of traits;
- Male is positive while female is not; and
- Males are powerful while females are powerless.

2.6 Gender Biased Language in Textbooks

2.6.1 Introduction

Language is an institution that reflects social values, and is thus an important vehicle for transmitting ideas about masculinity and femininity. Language gives some people the power to dominate, order about, organize, control and so forth. Words in a language are powerful tools that convey meanings through inferences and overtones. Gender bias can therefore, be portrayed through language by either writing or speaking. This is, however, at times done in subtle ways.

One of the concerns of feminists in analyzing textbooks for gender sensitivity has, therefore, been to determine linguistic bias. Feminists maintain that language if not handled properly, can in a variety of ways, promote the notion that males are superior while females are inferior. For example, Foley and Safran (1994) citing Chapman (1988) and Scott and Schau (1985) documented that over the past two decades (1974-1994), the use of gender-biased language in instructional literature has received increased attention. According to Schau (1988) cited by Foley and Safran (1994) the use of masculine generic language is one of the aspects that denote gender biased educational materials. When the words used are not equally inclusive of females and males, then the textbook is gender biased. Curricula materials can therefore, reflect the discriminatory nature of languages.

The discriminatory nature of languages have prompted researchers to carry out studies to examine the gender sensitivity of textbooks, taking gender linguistic bias as one of the research categories that have been content analyzed in their studies. In this section of this chapter, the portrayal of gender-biased language in textbooks has been reviewed. A detailed

discussion of how gender biased language is depicted in textbooks has been given. Several definitions of what constitutes gender-biased language in textbooks have also been given followed by a discussion of what constitutes the different aspects of gender bias. Aspects of gender-biased language include masculine generic constructions, use of generic terms, gender-neutral names and pronouns, and linguistic bias. Strategies and recommendations that have been employed in removing gender-biased language by researchers have also been presented.

2.6.2 Discussion of key concepts related to gender biased language

Different researchers have defined and discussed key concepts that constitute elements of gender-biased language in textbooks. The concepts include linguistic bias, masculine generic constructions, and use of generic language. According to Mosley (n.d) linguistic bias is defined as the use of language as a conveyor of biases and negative attitudes about a particular group. The group could be racial, ethnic or gender related. In this study, gender linguistic bias relates to males and females as a group.

A masculine generic construction is a concept defined as fixed expressions for “all” that tend to be male. These are called “generics” which imply that a word such as “he” is used generally to refer to both females and males. Such other generics include “man” “businessman” (Njabili in Obura 1994). The use of *masculine generic language* therefore, is the prevalent use in referring to people as male in general or to an individual when the sex of the person is unknown or is irrelevant (Lawrence and Tshuma 1992). When the sex of the character in illustrations is unknown, ‘he’ or ‘man’ is used as a substitute. In many stories including the Bible, the term ‘man’ is widely used as a generic term. All people are man. It should be noted however that masculine generic language, for example the pronouns, happens in specific languages like English and French. In Kiswahili and other Bantu languages the pronoun is the same for male and female. For Kiswahili language Obura (1991) cites Nandwa to clarify this issue in Kiswahili language.

2.6.3 Identification of aspects of gender biased language in textbooks

Different researchers and institutions have discussed aspects that constitute gender-biased language in instructional materials (Basow 1998, Kabira and Masinjila 1997, Grossman 1994, Michel 1986, Njabili 1994 cited by Obura 1994, Obura, 1991 and Sugino 1998). The FAWE (Kabila and Masinjili, 1997) has developed sub-categories on gender sensitive vocabulary

that relate to gender-biased language in textbooks. These sub-categories include naming, use of pronouns, use of generics and use of vocatives. According to Michel (1986) sexist language manifests itself in the choice of vocabulary, in the use of grammar, and in supposedly harmful insinuations.

Njabili in Obura (1994) and Basow (1993) have described elements in guidelines that can be designed to assist assessors in analyzing linguistic gender bias in textbooks. In using this guideline, assessors are requested to be sensitive to language, which is subtly sexist. They are required to be aware of the ways in which words and phrases reflect gender biased-perspective. In this guide, the assessors were cautioned to avoid:

- The use of generic terms that are male and therefore, fixed expressions for all. Such terms include ‘man’ ‘manpower’, ‘mankind’, ‘son of man,’ ‘master’, ‘master list’, and “master timetable”. Also to be avoided are verbs such as ‘to man’ and ‘to master’ which are used in a generic sense. Vocabulary that is characterized by an excessive use of the masculine gender to denote all individuals, males and females, who make up the human race, is classified as sexist by Michel (1986).
- Exclusive and continual use of male pronouns (he, him and his), adjectives and nouns. This is when the pronouns he, him and his are used generically;
- Making stereotypes distinction. Basow (1993) has elaborated this where gender-biased language is depicted through stereotypes. When women and men are labeled in such a way as to imply exception to the general rule (for the gender), that is stereotype labeling. Such labels reinforce gender bias. Such stereotypical labels among others include “lady doctor”, “career girl”, “she is a policeman”, “woman of the year”, delegates (in a conference, for example) and their wives, each farmer and his wife and (Cabinet) Ministers and wives. The sexist message is that conference delegates and cabinet Ministers can only be men. The correct gender inclusive language would for example be delegates and spouses/partner and Minister and partner/spouse.
- Making references to occupations that connote males - Man is used as a suffix and frequently used in occupational titles. Such references include “chairman”, “spacemen” and mailman”.
- Imbalance of word order is another form of linguistic bias. Gender in language and syntactic sequencing is depicted in such phrases as “husband and wife”, brother and sister”, boys and girls”, “the farmer and his wife.” Females are defined by the order which is usually in

second place. Such sequencing, which connotes gender bias in language, should therefore be avoided;

- Contexts that denote dependency and subservience in filling in required information that relate to “legal,” “immigration,” “business,” and “bank forms”. Females are required to fill in information that relate to the spouses. Such information is not required from husbands in most cases;
- Females are described by appearance while men are not. An example is given of set problems in physics textbooks where a woman (Mary) is described of her beauty while in another problem a male professor is described as courageous in carrying out activities. The implication is that appearance for women is more important than for men and that appearance may be the cause of a woman’s circumstance or predicament; and
- The frequent grouping of “woman and children” together which suggests a dependant status. Females are also predominantly referred to, by relationships, and described as possessions as in “The pioneers moved west taking their wives and children with them.” or “Jane Doe, wife of John Doe and the daughter of Mr. and Mrs. Joseph Smith....” Another example depicting gender bias in languages is by the unequal pairing as in “man and wife” instead of husband and wife.

The findings of gender-biased language as depicted in textbooks are discussed in the following section.

2.6.4 The use of gender biased language in textbooks

In a UNESCO study (Michel 1986) in Norway, three history textbooks were examined. The number of nouns and pronouns that were used to denote male and female characters were determined. The findings revealed a marked preponderance of masculine nouns and pronouns over their feminine equivalents. For class four history textbooks for example, the number of times that male nouns and pronouns were mentioned was 365 (78%) compared to 180 (22%) females mentioned. The difference was even more marked for class seven textbook where the mention was 399 for males and 45 for females, the percentage being 90 and 10 respectively.

Foley and Safran (1994) explored whether gender biased language as measured by frequency for gender specific pronouns in learning disabilities textbooks were present. In carrying out the study, a classification of pronouns into masculine (he, him and his), feminine (she, her and hers) and neutral (it, they and he/she) were made at the commencement of the study.

From an exploration of gender biased language in two editions of the learning disabilities textbooks, the findings varied from male to female textbook authors. The findings showed that the male authors' work exhibited 7:1 ratio in the use of masculine to feminine pronouns whereas the texts written by female authors depicted no significant differences in the use of gender specific pronouns. The male authors however, increasingly used gender-neutral pronouns compared with earlier editions.

The findings by Foley and Safran (1994) which showed female authors depicting no differences between the number of male and female characters, parallels a study by Witt (1997). In her study on linguistic bias of 16 basal readers the findings indicated that the only areas in which females were presented more often were stories written by female authors. Female authors were more likely to fairly represent both male and female characters and to write characters that possess a balance of masculine and feminine traits. Male authors wrote almost exclusively about males and masculine experiences and rarely portrayed males as androgynous.

The findings on the use of generic 'he' in textbooks have been found in different studies. In African Commonwealth countries where Davies (1995) conducted a study, language textbooks had used male pronouns as generic. This would mean that the majority of references to the professions were to male persons (p.9). The same findings on the use of 'he' as a generic term were also made throughout the texts in Commonwealth countries in Asia. The author remarks that the use of the generic 'he' would lead the readers of the texts to believe that all characters were males.

According to Sugino (1998) sexism is tightly linked with language. "He" "man" and "mankind" are used to represent all human beings. Whenever a generic term is needed, the use of masculine term is used as a proper form compared to a lesser use of 'her' or 'she'. In her study (Sugino 1998) on gender stereotypes in children's literature in Japan and America, the findings indicated that the use of generic terms like 'he' 'man' and 'mankind' were often used to represent human beings. Oftentimes, a masculine term was used for generic term as proper form.

Lawrence and Tshuma (1992) also examined gender-biased language in Zimbabwean primary school basal readers. The findings indicated that male generic language was prevalent.

People were generally referred to as male or as an individual when the sex of the given person or character was unknown. The male generic language was also widely used even in animal stories.

The findings from the study on science textbooks showed other ways of gender bias in the language used that of deprecating female characters. Examples of such deprecation are problems in the physics textbook. Part of the problem stated, “Lovely Mary Bell swings from a trapeze”. This could be compared with another problem involving a male professor who “dares devil stunts in his spare time”. While Mary Bell’s physical attributes (and not her courage) are shown, this is not the case with the male professor whose physical attributes are not mentioned. He is depicted as courageous, which is a male-pegged positive characteristic. His decorative qualities are not stressed, while Mary’s physical beauty is apparently a factor worth mentioning according to the author.

2.6.5 Measures to do away with gender biased language in textbooks

Several attempts have been made by publishing houses and authors to reduce the use of gender-biased language in instructional materials. Researchers such as Biraimah (1988) and Michel (1986) among others have discussed efforts by publishers and education systems, to minimize gender biased language in textbooks, and to prevent usage of such textbooks.

According to Michel (1986) for example, the increased sensitivity to the issue of gender bias in the language used in textbooks, many academic publishers have produced guidelines for authors and made interventions in editorial work of the textbooks. Some of the publishing houses that have produced such guidelines include: American Psychological Association (APA) 1983, McGraw-Hill Company-1984 and Fernand Nathan Publishers-1980. The APA in 1983, for example, developed and issued guidelines to be used by authors and editors on how to avoid sexist language in all their work. The APA Publications and Communications Board-1982 policy required authors to use non-sexist language so as to avoid in their manuscripts, language which might be considered as sexist.

Fernand Nathan Publishers have drawn up recommendations to textbook authors and illustrators, using French language. According to this publisher, traditional examples in grammar, vocabulary and exercises are discussed. It is recommended that sexist language should be avoided. The French language, for example, frequently uses the masculine pronoun

in general, as well as verbs like 'invent,' 'work,' 'make,' 'build,' 'repair,' and 'organize,' that take a masculine subject, while the verbs 'chatter,' 'wash' and 'cook' often have subjects in the feminine gender. This creates stereotypical attitudes in the readers. Allowing such sexist connotations and situations to persist in textbooks runs directly counter to the educational purposes of creating gender equality in such books.

Biraimah (1998) suggests interventions at the level of selection of appropriate textbooks by teachers. They should ensure that the textbooks are free from gender bias. According to her there are several publishing houses that have published guidelines that are meant to aid teachers in the selection of textbooks. Teachers are required to check:

- if the language of the textbook does perpetuate gender imbalance; and
- the use of masculine gender generic language.

Based on findings on gender-biased language in textbooks, researchers have oftentimes recommended to publishers that the editing processes need to become vigilant (Foley and Safran 1994; and Obura 1994). Authors and editors, whether females or males, are required to closely follow such guidelines developed by APA (1982) to avoid non-sexist language in all their textbooks (Foley and Safran 1994). It is argued that equal gender and unbiased information dissemination are vital and ethical responsibilities of publishing companies.

It should be noted however that having a guideline in writing textbooks that are free from gender bias is not a panacea to removing sexism in textbooks. It has been noted by Davies (1995:10) that sex biases exist in Indian textbooks despite the existence of guidelines to remove gender bias. There is also an active women's studies group, which is working on the texts to monitor sexism in textbooks. It is recommended, therefore, that guidelines must be clear and practicable and directed to authors, illustrators, teachers, publishers and educationists. To make the guidelines successful, it was recommended that the guidelines, among other issues, must be accompanied by:

- Changes in the education policy;
- In-service courses for everyone involved in the education of children;
- Periodic monitoring of books in use in classrooms;
- Development of guidelines for working with existing biased materials;
- Teaching students how to content analyze biased materials through learning to recognize the biases and omissions; and finally

- Development of schemes to encourage more women activists, illustrators and photographers to become involved in the production of children's books and textbooks.

Another suggested strategy in an attempt by authors and editors to reduce the direct use of masculine language, has been resorting to passive voice and plural 'you', 'they' and 'we'. This procedure, as one of the strategies to evade the use of gender biased language, however, has been criticized by some researchers and academicians who include Mosley (n.d).The passive voice incidentally is known to have the effects of depersonalizing the language in the different subjects. Findings by Mosley (n.d).depicted that the texts using passive language were characterized to a great extent by authorized concern for student learning but lacked warmth with the authors and the reader. The author becomes remote and anonymous, possibly alienating the reader. In order to cover these shortcomings the use of vignettes, problems and case studies in textbooks is recommended. This strategy is an alternative to the above noted weaknesses in the text. Depicting textbook characters in vignettes, problems and case studies, assists the authors to speak more directly to the students. According to Clarkson (1993) people are shown doing different things in textbooks in order to give the message clearly that mathematics is not just working with abstract symbolism, but it also affects people in their day-to-day carrying out of activities.

Publishers are required to make an effort to ensure that women are visible both in the text and illustrations. For example, there should be sportswomen as well as sportsmen, female carpenters as well as male carpenters. The use of human artifacts is preferred to 'man-made objects'. When there are no illustrations, it has been observed that because of the socialization process, children would read 'doctors' as males and 'cooks' as females.

CHAPTER THREE

GENDER ROLES IN TEXTBOOKS AND THE EFFECTS THEY HAVE ON LEARNERS FROM THE HIDDEN CURRICULUM PERSPECTIVE

3.1 Introduction

For the purpose of understanding the effects of the portrayal of gender roles in textbooks on learners, different curriculum concepts have been briefly discussed. The concepts include the meaning of official and hidden curriculum and what each of the two types entails. The differences between the characteristics of the official and the hidden curricula have been discussed and compared. A discussion of what constitutes hidden curriculum in general in the schooling process/system and also in relation to gender roles in textbooks has also been carried out. A literature review on the effects of the portrayal of gender roles has been carried out from the perspective of hidden curriculum. Both positive and negative effects, and importance, of textbooks in implementing the official curriculum in an education establishment have been discussed.

Based on the Social Learning Theoretical framework, positive and negative effects on the users of non-sexist and sexist textbooks have been discussed in relation to hidden curriculum. The hidden gender role messages that learners receive in the process of participating in the official curriculum using textbooks have also been shown, in relation to the categories used in the content analysis exercise on the portrayal of gender roles in textbooks. In the last part of this chapter efforts to stamp out sexism and gender stereotyping in developed and developing countries have also been discussed.

3.2 Curriculum as a Process

Gender stereotyping in textbooks takes place during the implementation of the official curriculum. According to Print (1987), curriculum denotes all planned learning opportunities offered by school to learners and the experiences learners encounter when the curriculum is implemented. According to Print, this does not include the hidden curriculum. In order to underscore the interplay between official intended curriculum and hidden curriculum, curriculum is briefly discussed as a process (UNICEF 2000). Curriculum is a process that includes intended (official), taught and learned curriculum.

3.2.1 The official curriculum and what it entails

The official or intended curriculum is also known as the explicit, overt or written curriculum (UNICEF 2000). It refers to the formal, approved guidelines for teaching content to pupils that is developed for teachers. Usually, this is accompanied by pupils' textbooks and teachers' guides. In Tanzania the TIE, a national curriculum development centre under the Ministry of Education and Culture, develops the official or written curriculum. It is the intended written part of the formal instruction of the schooling process. Once the official or written curriculum has been decided by TIE and approved by the MOEC, the curriculum is translated into materials for textbooks, teachers' guides and other resource instructional materials for pupils and teachers. Textbooks are required to closely match and not deviate from the curriculum with specified learning outcomes. Teachers are expected to use the textbooks and teachers' guides to teach the intended/official curriculum to children and thus meet the nation's goals. The nation's educational goals in Tanzania are stipulated in the Education Training Policy. The policy has directed the broad set of guidelines for the overall curriculum. Using subject specialists in panels, curriculum developers at TIE determine the subject objectives, content to be learned, the teaching and learning strategies and evaluation procedures. A curriculum, therefore, defines the subjects to be taught, how the subjects should be taught and furnishes the general guidance regarding the frequency and duration of instruction. The official intended curriculum is then given to teachers for implementation through teaching and learning in a classroom situation. This is the taught curriculum.

3.2.2 The taught curriculum

With the taught curriculum, teachers implement the intended formal curriculum comprising the content and concepts in the curriculum guides. This is done by mastering the content to be taught, considering how their pupils learn, take into account the particular learning environment of their pupils, and then adapt the curriculum materials and textbook information in ways that will enable all students to learn. In view of the prevailing teaching environment, teachers are required to develop strategies and use developed or improvised materials that will help pupils learn to reach specific standards of performance. The taught curriculum therefore, is the actual curriculum in use and which is delivered and presented by a specific teacher to learners.

3.2.3 The learned curriculum

The learned curriculum is what pupils actually take in and make sense of from the intended and unintended curricula. In the school, students acquire knowledge, skills and attitudes. The learned curriculum consists of what sense children make of the written and taught curriculum and how they are able to organize, apply, and represent their new understandings of the messages delivered. The learned curriculum therefore, refers to what happens to students in the teaching and learning encounter. Some of these messages constitute the hidden curriculum, which can serve to advance the agendas of various groups in society, thus reproducing social inequalities and in this case, gender inequality.

In looking at the curriculum as a process, the role of textbooks in implementing the intended, taught and the learned curriculum cannot be over emphasized. The following is a discussion on the role and importance of textbooks in implementing the curriculum. The importance of textbooks is also discussed in relation to the amount of time textbooks occupy in the teaching and learning process and hence the influence it has on pupils.

3.3 The Importance of Textbooks in Implementing the Intended curriculum

Different scholars see textbooks as important tools in the teaching and learning process (Biraimah 1985, Brummellen 1990, Dreyfus 1992 and Lawrence and Tshuma, 1992). Textbooks in a classroom setting have set purposes and are important tools in the schooling process. According to Westbury (1985) cited by Dreyfus (1992);

“... textbooks are considered as the repository of knowledge that the schools communicate. It is a basic tool for teaching and learning.”

Textbooks are a significant source of information. According to Hilton (1972), as cited in Lawrence and Tshuma (1992), textbooks are appropriately simplified and arranged in a way that fits the targeted learners. This being the case, a school textbook is thus a principal repository of standard knowledge that relates to the explicit (official) curriculum. It is an intermediary tool and a reflection of educational objectives. In principle, therefore, a textbook presents the intentions of official curriculum as designed by curriculum developers.

Brummellen (1990) sees the importance of textbooks as tools for framing of classroom learning situations. They play an important role in translating the official curriculum that

deals with different aspects of education such as those in the economic, social and moral conceptions. Textbooks thus remain one of the determinants of education. Both the pupil and the teacher consider them an indispensable part of education activities. Pomerence (1996) also cited the work of Kuhn as cited in Alfred and Thellen (1993) on the importance of textbooks. Both students and teachers view textbooks as sources of authority. This being the case, textbooks occupy a unique place in the instruction of young learners who are an easily influenced impressionable audience because of a lack of critical ability when reading books. Research shows that when children are asked to name the books they have read, they name textbooks among the books.

According to Gupta and Yin Sin (1990: 48) the learner's motivation in reading textbooks was likely to centre around satisfactory completion of the official intended curriculum so that they can realize academic achievements of passing set examinations that are based on the syllabus. The readers are obliged to read what is available to them. The importance of textbooks in relation to the teaching and learning process can also be well gauged by the amount of time textbooks occupy in the instruction process.

3.3.1 Textbooks in relation to instructional time

Witt (1997) has cited the work of Mee (1987), Alson (1980), Woodward and Elliot (1992) who have suggested that textbooks account for anywhere from 75% to 90% of teaching and learning school activities. Studies by Schau (1984) are in agreement with the above amount of time. Biraimah (1987) and Lawrence and Tshuma (1992) both cite studies by Schau who indicates that approximately 90% of the time spent in classroom instruction involves the use of instructional materials which include textbooks, films, records, tapes, television and computer software. She furthermore states that outside school, students also spend large amounts of time on the same kind of materials. In developing countries the prominence of textbooks as a tool for teaching and learning compared with other types of instructional materials cannot be overemphasized. According to Obura (1994) textbooks are the key instructional materials compared to other materials, as there is low access to visual media in such countries. In most developing countries books are ever scarce and the textbook is often the first book to be handled by the child. Textbooks have relative durability as a pedagogical resource. They last for several years. Some are used for over 10 years before they are changed.

We can then conclude by saying that textbooks are very crucial in our educational systems.

Textbooks have a wide range of benefits as they:

- are a source of information;
- are image forming;
- shape attitudes, learning and teaching;
- are agents of socialization; and
- are a basic tool for access to approved and long-time knowledge.

Textbooks are therefore among many of the socializing factors in the lives of children especially in Africa. They are highly prized and have a lot of influence on the reader. Almost all studies on textbooks in low and middle-income countries show that textbooks have a positive impact on students' achievement (Michel 1986 and Obura). Apart from textbooks being sources of information on the academic sphere in teaching content, they are also used in the socialization process through image forming. Textbooks shape attitudes by transmitting a society's culture of the children/readers. Gender roles are an important part of that culture. The way male and female characters are portrayed in textbooks contributes to the images children develop of their own roles and that of their gender in the society. This is acquired through the hidden curriculum, as this is not part of the official, intended curriculum. What hidden curriculum entails, how it is generally perpetuated at the schooling level, and how textbooks are responsible in transmitting gender roles, are discussed in the following section.

3.4 Hidden Curriculum and what it involves

Different sociologists and researchers in education (Dwyer 1982, Foley and Boulware 1990, Kabira and Masinjila 1995 and Print 1987) have discussed what hidden curriculum is as opposed to the official curriculum. Hidden curriculum refers to the outcome of unintended side effects of the official curriculum but which are nevertheless communicated to the pupils and students in education institutions (Print 1987). It includes those aspects of learning in schools that are unofficial and unintentional. Curriculum therefore, goes beyond official statements of intention whether these are stipulated in the syllabuses or teachers' guides. Pupils therefore learn other things in school besides the intended curriculum. These aspects are described as "hidden curriculum".

The hidden curriculum describes those forces which shape the non-academic and unmeasured learning outcomes. In hidden curriculum, content, attitudes or behaviours are taught and learned without the conscious intention of the teacher or learner. The hidden curriculum process, therefore, leads to outcomes of education, which are not explicitly intended by educators. Educators may not intend these because they are not stated by teachers in their oral or written lists of instructional objectives nor are they included in educational documents such as syllabi and/or school policy. The hidden curriculum passed on to students is essentially “hidden” from them at least in the sense that it has not been stated explicitly. It may not only be hidden from students but also from teachers, at least at the conscious level. It is argued that hidden curriculum is however, powerful and is portrayed in so pervasive and subtle ways that teachers and students may not be fully aware of its effects (Witt 1997). At times hidden curriculum can be contradictory to the intended curriculum.

Hidden curriculum in education institutions manifests itself at general schooling level and other specific levels in the schooling process. In the following section the concept hidden curriculum is discussed at a general schooling level and the accompanying effects on students’ schooling outcomes.

3.4.1 Hidden curriculum at the general schooling level

According to Banaars and Kabira (1994), education, like other institutions in society, perpetuates stereotyped images of males and females. There is a difference in the manner girls and boys are treated in the schooling system. This differential treatment leads to gender inequality which is called sexism and is one of the aspects of hidden curriculum. The hidden curriculum may include either positive or negative messages, depending on the models provided and the perspective of the learner. The hidden curriculum has undeclared consequences in the way schools are administered and also how teaching and learning are organized and performed.

According to Dwyer (1982) schools are responsible for transmitting information and skills in the academic disciplines, and for explicit instructional, social and personal attitude through the official curriculum. It can be argued that the way the curriculum is structured appears to be gender neutral as all prescribed content is taught to all learners including both girls and

boys. However, apart from transmitting the explicit curriculum, schools also transmit hidden information on the subject of what constitutes appropriate gender role behaviour and attitudes. The content of textbooks for example, indirectly transmits gender roles to them thereby influencing them in some way.

Hidden curriculum at the general schooling level in relation to gender can manifest itself in various ways. The transmission of appropriate gender role behaviors and attitudes in schools can thus be accomplished through a wide variety of mechanisms including:

- Indirect attitudinal instruction from teachers prevailing in the school setting. There are differences in teacher behavior towards boys and girls. Findings from studies on classroom interaction analysis, teachers' attitudes and expectations have indicated that boys receive more attention than girls. Boys' achievement drive is encouraged in scientific and mechanical projects. On the other hand girls are encouraged to act like little ladies, to be docile and passive (Davies 1995, Kabira and Masinjili 1997 and Sadker and Sadker 1991). It is documented that teachers in answering boys' questions leave the quiet girls to work in the background and spend much time in class without the assistance of the teacher. Davies (1995), Kabira and Masinjila (1995) and Sadker and Sadker (1991), among others, have noted gender bias among the different forms of discrimination in the teaching and learning encounter in the classroom. The biases by teachers noted by them which are a manifestation of hidden curriculum, include:
 - A systematic bias against girl pupils,
 - A dominating attitude towards girls,
 - A restriction of girls' potential and responsibility,
 - Insulting language and behavior towards girls,
 - Unfairness in assessment, award and remuneration, and
 - Continuous stereotyping;
- Banaars and Kabira (1994), Davies (1995) and Michel (1986) have extensively discussed the issue of implicit gender related curriculum structures in pursuing different subjects. For example, they have noted Domestic/Home Science related subject being the domain of girl students and technical related subjects being the domain of boys;

- Implicit gender related organizational school structures where the sexes are for example, segregated into the traditional division of labor in carrying out school activities. This is a perpetuation of the division of labor based on gender that prevails in the larger society (Keller et al 1999 and Mukangara and Koda 1997). The segregation in sports and games is another example of gender bias in the schooling process especially in carrying out extra curricula activities;
- Gender role modeling on leadership of the personnel of the professionals in educational institutions very much affects girls. It is documented for example, that in the West, while the majority of primary school teachers are women, males dominate the leadership positions such as principals of schools. The girls, as a result of this situation, cannot model themselves on such personalities for leadership positions; and
- Gender stereotyped classroom instructional materials including textbooks. There has been much focus on gender stereotyping and sexism in instructional materials whose findings have amply been documented. This has been thoroughly discussed in chapter two of this study, which reviewed the literature on the portrayal of gender roles.

It can be noted that hidden curriculum transmits to the pupils a collection of gender role messages about the status and characteristics of males and females. This is through the social organization of the school and the attitudes and omissions of what is not taught, highlighted and illuminated in the official curriculum. These are often influential factors for gender bias and by and large are messages that reinforce what is happening in family settings and the society at large. Hidden curriculum has therefore a set of practices, which might eventually affect the participation, and achievement of the victims. As it has been noted from the above five points, such practices include teacher-pupil relationship and implicit textbook content which reinforce gender stereotyping.

Apart from the manifestation of gender roles at the general schooling level, the portrayal of gender roles is also prominent in textbooks as has been noted in Chapter two of this study. The following section is a detailed discussion on how hidden gender role messages through curriculum are transmitted to pupils through textbooks.

3.4.2 Hidden curriculum and gender role messages in textbooks

The ways in which textbooks are written oftentimes communicate messages that are not officially included in the formal curriculum. These messages constitute the hidden curriculum and can be responsible for reproducing social inequalities. As it has been noted, learning of the officially-sanctioned curriculum is via textbooks. Textbooks at least influence to a certain degree students' views of society, which are not necessarily explicit.

Several researchers on gender roles in instructional materials, including textbooks, have documented the role and importance of textbooks in the teaching and learning process. They have shown not only the role and importance of textbooks in implementing the official curriculum but also the effects gender role messages have on textbooks as far as hidden curriculum is concerned. These researchers include, among others, Biraimah (1988), Brumellen (1990), Lawrence and Tshuma (1992), Obura (1991, 1994) and Pomerence (1996).

Foley and Boulware (1990) quoting different researchers have shown that both subtle and overt values are transmitted through the content of reading textbooks (Fisher 1965, Hitcher and Johnson 1969, Jackson 1944, Smith 1981 and Toure 1967). In relation to hidden curriculum, through reading textbooks pupils unconsciously acquire gender roles in terms of attitudes, values, behaviors and interests. The gender roles are transmitted to learners indirectly. Focey and Boulware (1990) who cited Pico (1981) discussed gender equity in relation to basal readers. The social equity applies to basal readers since readers of such textbooks not only share reading skills but also the very belief and value systems of readers. Children, through reading textbooks, thus formulate social attitudes and behavior towards gender roles, in addition to learning basic skills. Depending on how gender roles in given textbooks are depicted, the exposure to such textbooks in the classroom can promote negative or positive effects on learners' attitudes towards themselves and others.

Before discussing in detail the positive and negative effects textbooks have on learners, as far as the depiction of gender roles is concerned, the following is a discussion of the theoretical underpinnings on how the effects can be acquired by learners via textbooks:

- The school as a social institution is authoritative and the textbooks used carry authoritative messages on role models. The school and the textbooks preach social conformity in behaviour and ideology. We also know that the school attending children are a captive audience that is exposed to a common national curriculum. Therefore, they are exposed to a common culture, ideology and a common set of values or norm.

From the above, we can then end by saying that the textbooks that we use in schools must present both male and female gender fairly. This is because the image that both boys and girls receive in school shape their self-perceptions and views of themselves. It also shapes what they grow out to be in society.

3.5 Theoretical Framework

3.5.1 Introduction

The above discussion indicates the importance of textbooks as far as the implementation of the official curriculum in schools is concerned. The discussion has shown the relationship between gender role hidden messages and textbooks. There have been, however, concerns about the portrayal of gender roles in textbooks and their effects on users from a theoretical perspective. One would ask why should there be studies on the portrayal of gender roles in textbooks. According to Sprague (n.d), textbooks play an important role in the process of the acquisition of gender identity in children. Acquisition of gender identity, as it has been discussed, is not part and parcel of the official curriculum but that of hidden curriculum. Textbooks help in defining acceptable and unacceptable behavior for females and males, the options that are open for them in society and to which gender they are available. In order to understand the formation of gender identities and their effects on learners, it is important to discuss the Social Learning Theory and its relationship to the depiction of gender roles' in textbooks.

3.5.2 The Social Learning Theory and acquisition of gender identities

Different authors (Foley and Boulware 1990; Mischell (1966); and Bandura 1971, cited by Zenden 1984) have discussed the Social Learning Theory in relation to acquisition of gender identity. The general thrust of the Social Learning Theory is in its emphasis on the socialization impact of the society on the child. According to Zenden (1984) who quotes Mischell (1966) and Bandura (1971) it is suggested that parents, peers, teachers and other

people serve to establish appropriate habits through reinforcement. As far as gender identity of the femininity and masculinity traits is concerned, the acquisition is through the process of socialization and cognitive development. The person comes to learn what is suitable for one's sex through the socialization process.

From the general Social Learning Theory, as it relates to textbooks, there are the modeling and cognitive development approaches. These apply to gender role acquisition from textbooks. Researchers such as Foley and Beverly (1990) among others have discussed the application of the modeling theory in relation to the portrayal of gender roles. According to the modeling theory, which is used to analyze the impact of children's stereotypes on curricular materials, it is suggested that children will attend to, and copy attitudes of characters in textbooks and other instructional materials. According to Focey and Boulware (1990) and Lawrence and Tshuma (1995), in order for learners to be motivated to learn and achieve, it is argued that textbooks should contain characters with which learners can identify. Foley and Boulware (1990) argue that students, who do not find characters in textbooks that are of the same sex with them to use for role models, can be disenchanted. This dissatisfaction with their ability and potentialities is not only related to other social groups in terms of school reading assignments but also the very focus of school. It should be noted that from a cognitive development approach, it is suggested that children use the characters in textbooks to develop their own views of what masculinity and femininity involve.

Lawrence and Tshuma (1992) cite Frasher and Walker (1972) to indicate the relationship between book users (readers) and acquisition of behaviors as they relate to gender. Children learn what constitutes gender appropriate behavior from gender role expectations and the role models they observe around them. The books they read both in and out of school provide a major source of role models. It is argued for example, that if these models show women in limited stereotyped roles, girls may tend to limit their own expectations.

The self-esteem, fears and aspirations of students are all influenced therefore by the extent to which they identify with the characters and situations that they encounter in the print. This becomes especially true when the readers become emotionally involved with the characters.

Character identification leads to students modeling their own behaviors after role models. First and foremost textbooks present models of people. They present behavior and thought patterns which imply that they are good to copy. The situation of role modeling is well substantiated by Foley and Boulware (1990) who cite Boulware (1986) who has given an example of a twelve-year-old girl. The girl comments that:

“I like to read because I can relate with the characters in the books I read. In the textbooks I read the characters that are usually the same age as me, I can therefore, relate with things they are going through”.

3.6 Implications of Differential Portrayal of Gender Roles to Textbook Characters

The rigid textbook pegging of gender roles to male and female characters results in sexism. According to Michel (1986), sexism is a result of attitudes, actions and instructional structures, which subordinate or discriminate against an individual or a group of people because of their sex. Sexism through textbooks has both negative educational and developmental implications for male and female learners who use the sexist textbooks. These implications, which have negative effects on learners, are discussed in sections 3.6.1 to 3.6.5 based on the categories that have been used in this study for content analysis.

3.6.1 Effects of disregarding gender balance of female and male textbook characters

Textbooks that do not take into consideration gender balance in the frequencies of the presentation of male and female characters have different effects on the readers. The imbalance can be in the illustrations, text, and from named and unnamed characters. It has been noted from past research findings that females compared to males are the disadvantaged gender as they are altogether omitted or under-represented in textbooks (Koza 1994). Significant omission or under-representation of some characters based on gender has the implication that females or males are of less value, importance and significance in society (Charlotte 1976). Students learn to take for granted the alienation of women from all sectors of the society, culture and history (Korea Working Women Network, 1997). If certain groups of people were ignored, children would feel that the textbooks do not acknowledge their existence.

In relation to named and unnamed characters in textbooks, it is easier for a reader for example, to identify with a named character than with an unnamed one (Kabira and Masinjila

1997). Children would as a result lack role models with which they would identify. The fact that textbooks place more importance on males has an impact on children's development. Lack of role models on the part of girls also affects them. Girls, like boys, need achievement-oriented models to which they can relate or identify. The issue of modelling has also been discussed in relation to effects on learners to the subjects studied.

The findings by Michel (1986) in French textbooks and that of Obura (1991) in Kenyan textbooks, on mathematics and science respectively are the point of reference. In these textbooks, apart from displaying sexism in text and illustrations, the depiction encouraged only boys to take science and mathematics subjects while girls were excluded from them. In mathematics textbooks where a great number of boys and men were more represented than girls and women, there tended to be an indication that mathematics is essentially a man's subject.

3.6.2 Effects of gender stereotyping in reproductive and productive roles

The stereotyping of characters in relation to gender results in limiting abilities and potentialities of both male and female characters in carrying out of reproductive and productive activities. Stereotyping also limits the development of positive personality traits as regards to these gender roles. Research findings have indicated that female learners are more affected by gender stereotyping in terms of realizing most of their abilities and potentialities in career aspirations. In a situation where the portrayal of gender roles in occupational fields is stereotyped, the career choices of different types of occupations become limited.

When women characters are for example not remunerated in the carrying out of reproductive and productive roles, and the fact that wives are consistently depicted turning to husbands for cash, coupled with the depiction of invisibility of the female labor, can have negative effects on the messages readers receive as regards the inter-dependence on other people (Obura 1991). This biased depiction makes the pupils learn from textbooks about a one-sided dependence of women on men. Such portrayal would not make the young learners learn about the dependence of men on women in terms of food production, storage and processing, agricultural labor and other reproductive roles. Interdependence of men and women on equal footing is important in bringing about development and harmonious living in the family and community at large.

Findings, for example, that portray boys being presented in a wider range of numerated productive roles encourage boys to view the world of work in a wider perspective and possibilities for themselves. This is not the case with girls who are directed towards a much narrower range of possibilities of unremunerated productive roles and reproductive roles almost all cantered on domestic context. The findings show for example, that adult women in textbooks were assigned roles of mother and wife almost exclusively, while men were found occupied in a wider variety of jobs and activities but rarely in parental roles. The hidden message is that the typical worker is male. For a female to be a worker is not common (Biraimah 1988). The implication that a female worker is atypical is likely to be encoded into the child's developing gender schema as far as gender division of labour is concerned. There may be important consequences for a child's self-esteem and self-confidence, as well as for her or his career aspirations.

3.6.3 Effects on gender role stereotyping of personality characteristics

Gender roles stereotyping of personality traits to female and male characters into masculinity and femininity has positive and negative traits on learners (Gupta and Lee Su Yin 1990). The pegging of such stereotyping is limited as it reduces both males and females to a specific range of attributes and characteristics. There are thus psychological consequences of gender role demands on males in the personality traits expected of them. Man is, for example, perceived as strong, dependable and a breadwinner. Such a state results in restricting males' expectations of emotions to the denial of themselves and also to having open relationships. With women, the psychological consequences for them are to occupy an inferior social status and subordinate social role within the community. Traditional unquestioning acceptance of such a position has devastating consequences where the self-esteem of females in particular is negatively affected (UNESCO 1992). According to Bem (cited in UNESCO 1992) boys and girls who conform to rigid traditional gender roles score low on tests of intelligence and creativity.

Reading for a long time (about 20 years) textbooks that encourage male and masculine behaviors and ignore or discourage female and feminine behavior was likely to play a major role in the development of gender attitudes that disregard gender equity (Gupta and Su Yin 1990). When women are portrayed fewer times than men and boys, and as passive, dependent, weak, fragile and even dumb, engaged in non-remunerative or poorly paid and less prestigious occupations, their future life chances are jeopardized. Apart from the

findings that female characters are narrowly pegged to personality traits, they are conveying negative themes of victimization, dependence and wickedness (Biraimah 1988 and Sugino 1998). This is in contrast to males who are depicted in numerous and varied personality traits which in the long run have positive effects on the beholder.

3.6.4 Effects of using gender biased language on learners

The use of gender-biased language in textbooks has different effects on both female and male readers according to a specific gender (Basow 1993, Hezel et al 1994, Kelly 1996, Obura 1991 and Sugino 1998). According to Basow (1993), sexism in the English language takes three major forms: ignoring, stereotyping and deprecating females (Henley 1989, Lakoff 1975 and 1990, Thorne, Kramaran and Henley 1983). Ignoring females is manifested by using masculine gender to refer to human beings in general. The use of male terms to refer to all humans makes maleness the norm and females the exception. Sugino (1998) citing Brouwer (1993) argues that the use of generic terms illustrates the inequalities between men and women in languages where ironically women are noticeable because of their invisibility. For example, the use of pronoun 'he' referring to females and males (human beings) produces the impression that women are ignored and passed over.

According to Kelly (1996) the use of generic he and male pronouns and nouns conveys the message that only males act or are important while the 'females are not'. Pupils constantly see words such as "man," "he," and "sportsman" used instead of words that clearly mean people of both sexes. Also, linguistic bias through the use of generic terms that are masculine, illustrates the inequality between males and females in a language. Female characters in this case become invisible. Where masculine generic language appears, sexist language therefore prevails. It should be noted that psycholinguistic research has demonstrated that texts, which refer to "he", do not provide women with the opportunity for identification (Brouwer 1993 cited by Focey and Safran 1994).

Several researchers, as cited by Basow (1993), have demonstrated this. People perceive the masculine "generic" to refer predominantly to males. The researchers cited include: Fisk (1985), Gastil (1990); Hamilton (1991), Mckay 1980) and Switzer (1990). An example is given of students from grade one through college when asked to make up a story, only 12% who had read the pronoun "he" in the instructions said that the story was about a female.

When the pronoun encountered was “they” only 18% said a story was about a female. This was not the case when the pronoun was “he” or “she”. The findings in this case showed that 42% of the stories were about females (Hyde 1984 cited in Basow 1993).

From the above findings on the effects of the exposure to readers on the use of ‘he’ ‘they’ and “he/she” pronouns, it can be noted that gender bias in language communicates and therefore reinforces sex-biased expectations about society. Male generic language results in gender associations that are frequently male. Also, gender specified language results in gender associations that seem to lead to the most balanced associations. Gender specified language, therefore, enhances the development of appropriate and flexible gender associations (Scott and Schau (1984). Clearly then the use of male pronouns is not gender neutral. Furthermore, it would seem that young children are unaware that ‘man’ or ‘he’ includes females. Children who are exposed to constant flow of information about ‘him” appear to conclude that the typical person “him” is a male.

The point of ignoring female characters and its effects is made convincingly by studies in mathematics textbooks where ‘he’ always solves problems. Children may unconsciously take the message that the mathematics instructional materials are really meant for boys rather than for girls (Clarkson 1993). This creates the impression that mathematics is not a female subject. Clarkson (1993) recommended that it is important that mathematics and science textbooks do not use language in a way, which can be seen to deny the existence of women and girls. Such presentation can lead women and girls to feel that they are excluded and are thus being discouraged from considering mathematics and science as a subject for them.

The use of generic terms sends the messages that can influence boys’ and girls’ expectations about their future roles including careers. Depending on the type of language bias portrayed in a textbook, one gender, in most cases female, is denied the possibility of participation in the different spheres of life. Women, for example, are potentially denied the legitimacy of working in some fields/occupations that are given masculinity labels such as *mailman, policeman and chairman*. An example is given that when a job description used only male pronouns, elementary and college students rated females as being unable to do that job (Hyke 1984, Shopelak, Ogden, Tobin-Bannett 1984, cited by Basow (1993). This example suggests that the most directly affected people on their aspirations for future roles as a result of using male generic language are females. Although females are a little less likely than males to

perceive the generic “he” as solely male (Hauston 1988, Henley 1989, Switzer 1990 cited by Basow 1993) most still do. The use of the generic ‘he’ is not just an arbitrary custom but also a continuing statement about the societal roles of women and men.

According to Michel (1986) the use of abstract nouns such as “mankind” “forefathers” and the “average man”, which are commonly used to describe humanity as a whole, or a social group, can lead children to believe that women had little influence throughout history and that women occupy a lesser role in the world than men do. Women are therefore, less important and less valued. The use of “*he man grammar*” and subtle sexist messages leave women with unmistakable understanding that they live in a man’s world where women and girls take second place.

Peterson and Larch (1990) and Mosley (undated) among others, have also at length discussed the effects that sexist instructional materials have on the readers. According to Peterson and Larch (1990) there are both affective and cognitive effects on users of sexist textbooks. Mosley (n.d) urges the importance of analyzing gender biased instructional materials in order to provide remedies because they can affect children educationally, emotionally and socially. The effects on the learners discussed by Peterson and Mosley are as follows:

- Repeated exposure to the images of gender stereotypes in textbooks has a likelihood of having detrimental effects on self-esteem, particularly that of girls. The development of positive self-esteem of girls is thus impaired. According to Mosley, if textbooks portray a certain gender as the norm, the self-image of the readers is damaged. For example, if textbooks show only or mostly boys in the textbook, the users of such textbooks may come to feel that society has no place for girls. It is argued on the other hand that materials that do include images of people of different genders can assist to counteract gender stereotyped messages coming from other sources in the society and help the readers to feel that they are significant members of the society;
- Negative attitudes towards the child’s own development potential and towards that of other children are induced through reading sexist textbooks;
- The child’s cognitive development can be altered as inaccurate and potential destructive views are presented. Based on examples of mathematics instructional materials, Mosley

(n.d) has argued that children can be prevented from fulfilling their potential in mastering different subjects. This situation can be attributed to the following reasons:

- Children who do not see their life style or the groups with which they can identify, can come to feel that the subjects are neither about them nor relevant to them. Such a situation can alienate them, affect their enthusiasm and lessen efforts they put into these subjects, and
 - Activities depicted in textbooks that lack meaning and purpose to the experience and knowledge of the child could lead the reader to find the content of the text difficult to grasp;
- How an individual perceives or evaluates the actual characteristics or performance of certain social groups is affected by one's views. As a member of a group in the society, he/she might internalize the perceived expectations. The failure to live to such expectations would cause the individual to feel less about herself and himself thus destroying one's self-concept; and
 - Children can acquire a narrow view of options in life. Textbooks that show one type of gender in a restricted range of roles carry the implications about the options that are open to that individual. The children belonging to that gender can have their perceptions of their future roles in society distorted. For instance, if textbooks show only women in domestic or service roles while men are depicted in a wide range of interesting high status occupations, children of both sexes may take the messages that girls are expected to fulfill only subservient roles in their future life. Such sexist textbooks, where boys are encouraged to view a wide range of life possibilities for themselves while girls are directed towards a much-narrowed range of possibilities; do not provide gender equity in the schooling system specifically, but also in the community at large.

Other authors who have also discussed the negative effects of sexist textbooks on girls include Michel (1986) and Marland (1994). On the negative impact on girls, Michel (1986) has discussed the following effects. Sexist textbooks:

- Create sexist images and stereotypes that curb girls' professional goals in order that they may fit into conventional stereotyped professions such as nurses, secretaries and typists.

In many cases such professions assign women to subordinate positions and lower salaries; and

- Make girls lose their independence and as a result, their development stands in the way of equality set out in national and international charters. In this way the society deprives itself of valuable human capital that would be obtained through creativity that girls and women would contribute, had they not been trapped in crippling shackles of stereotypes.

Michel's view (1986) is that sexist textbooks prevent girls and women from developing their full intellectual, emotional and vocational potential. This is attributed to the fact that they are not recognized as human beings on their own right, equal in dignity to boys and men. They are, as a result, denied a harmonious relationship with men and are prohibited from making full contribution to the development of the society.

3.7 Effects of Non-sexist and Sexist Textbooks on Users

Several researchers (Crossman 1994, Peterson et al 1990, Mosley undated and Scot and Schau 1985) cited by Koza (1994) have discussed the effects of non-sexist and sexist textbooks on the readers. According to Koza (1987) there is research evidence that indicates curricular materials having an impact on the formulation of children's gender related attitudes and behaviors. Koza cites an intensive study done by Scot and Schau (1985) on the impact of textbooks that are sexist and non-sexist on the users. The differences between the effects on users of sex-equitable and sexist textbooks are discussed in Section 3.7.1 to 3.7.2.

3.7.1 Effects of sex equitable instructional materials

The effects on users reading sex-equitable instructional materials include:

- Having gender balanced knowledge of people as equals in society;
- Developing more flexible attitudes and more accurate gender role behavior;
- Imitating gender role behavior contained in the materials;
- An increased motivation to read, learn and achieve. This is best accomplished when the textbooks being read contain characters with which the readers can identify. It has been

demonstrated that if the character is of the same sex as the reader, the reader will stay on the task longer and remember the story better (Koza, 1987); and

- Producing significant changes in children's thinking where children develop more egalitarian attitudes about what females and males can do. Children show decreased sex role stereotyping (Peterson and Larch 1990).

Grossman (1994) has summarized what different researchers agree upon on the effects of using non-sexist instructional material on the readers. The following findings are agreed upon:

- Exposure to sex-equitable materials to the same characters results in decreased sex-typed attitudes in students aged 3-22 years;
- Attitude change towards gender equity increases with increased exposure to non-sexist instructional materials; and
- Use of sex-equitable materials in schools help students to develop more flexible gender role attitudes, which allow them to make educational and career choices based on their own interests and potentialities rather than on preconceived notions of what is right for females and males.

3.7.2 Specific effects of gender role stereotypes on male and female learners

Michel (1986) and Obura (1991 and 1994), among other researchers have discussed the negative effects that both females and males encounter as a result of being exposed to sexist instructional materials. Sexism prevailing in schools, including that found in textbooks affects both boys and girls negatively. These researchers argue that while it is true that most of the studies on schooling and gender differentiation take girls as their focus, actually both boys and girls suffer from the existing sexism. The prevailing conditions keep girls out of technology, engineering, mathematics and physics. Boys on the other hand are kept away from modern languages, literature, and knowledge on child development, nutrition and much that they need to know for the betterment of their future lives.

Michel (1986) also discusses how curricular experiences through textbooks are delimiting to both girl and boy learners. While girls' experiences are narrowed to the traditional female

domains of activity, boys' experiences are also narrowed in terms of the human relationship aspects. Males' emotional and spiritual needs and their role in the family as husbands and fathers are affected negatively more specifically as parents.

Obura (1991 and 1994) has discussed the impact of sexist textbooks on boys and girls. Males and females are usually depicted in a stereotypical way where girls are being portrayed as passive and unadventurous beings. This is bound to lead children to receive an unintended hidden gender message. The point in this case can well be elaborated by the findings of Obura (1991), who found that textbooks in Kenya are written about boys. This being the case, children are bound to get the impression that girls are not important, as no one has bothered to write books about them. In the rare cases where females are shown in textbooks, they are insignificant and inconspicuous thus also lowering the self-esteem of girls.

Researchers also have discussed the issue of power relationship between the genders not only in the general schooling system but also with specific reference to textbooks. Textbooks can be seen as perpetuating and increasing the subordination of women by asking them what they are and not what they can do. It is argued that textbooks depict a man's world even when the population is predominantly female. In political terms, this situation shows that women are the losers although in human terms all people are losers.

3.8 Concluding Remarks on the Chapter

The discussion in this second literature review chapter on gender roles in textbooks and their effects on learners from a hidden curriculum perspective has shown what the official intended and hidden curricula entail. In discussing what curriculum means, curriculum has been taken as a process constituting the official, the taught and the learned curriculum. In this curriculum process, the importance of textbooks in the implementation of the official curriculum has also been presented. It has at the same time been noted that in the course of implementing the official curriculum using these textbooks, there are unintended gender role messages that learners acquire through hidden curriculum. The acquisition of gender role identities is based on the Social Learning Theoretical framework where in this case users (boy and girl learners) receive gender role messages that impact on them positively or negatively. The social

learning theory predicts what users of textbooks learn of what constitutes gender appropriate behavior from gender role expectations and role models they observe in these textbooks.

In view of the discussion on the negative effects of sexist textbooks that portray gender stereotyping and the positive effects to learners who use non-sexist textbooks, liberal feminists in different countries have very much been involved in exposing through research gender bias in textbooks. The objective of doing so is to take appropriate actions for eliminating gender stereotyping to produce non-sexist textbooks. Elimination of sexism in textbooks is one among other ways of ensuring gender equality in the schooling processes.

From the above discussion on the effects of textbooks on learners from a gender perspective, the concluding remarks drawn by Peterson and Larch (1990) are valid. They conclude that gender stereotypes in textbooks not only affect the learner's self-concept, potential achievement and perceptions of others, but also a variety of dimensions of intellectual performance as well.

CHAPTER FOUR

METHODOLOGY OF THE STUDY

4.1 Introduction

This section covers the research design of the study. It discusses the sample for each research method that was used in the study, the sampling techniques, the sample size for each research method, the development of the data collecting instruments for each study method used and a detailed discussion of the procedures in collection of data for each method.

4.2 Choice of Data Collection Methods

The choice of data collection methods depended mainly on the purpose of the research objectives and the issues that were under investigation. In this study there were three main objectives namely:

- To determine the nature and extent of the portrayal of gender roles in primary school textbooks.
- To gauge the mechanisms that have been instituted by the Book Management Unit (BMU), a Secretariat of EMAC in Tanzania responsible for overseeing the monitoring of the quality of production of school textbooks by publishing houses, and
- To examine the mechanisms that have been established by publishing houses to publish textbooks that are free from gender stereotyping.

Based on the above objectives, two research methods of data collection were selected: content analysis and interviews. Content analysis of gender roles was used in analyzing the portrayal of gender roles in the 40 textbooks. Interviews were carried out with the Manager of BMU and Managers /editors of publishing houses of primary school textbooks in use. The use of both methods facilitated a deep understanding of the depiction of gender roles in textbooks that are used in Tanzania primary schools and also the mechanisms that are in place in ensuring the production of textbooks that are free from gender stereotyping.

4.3 Data Collection Instruments

Three research instruments were designed for data collection purposes. These were the Content Analysis (CA) guide with the accompanying coding instrument and two interview

guidelines for publishing houses and the BMU.

4.4 A Detailed Discussion of Each Research Method

The following section details the methods used in this study. In each study method, its background is given, the sample, the sampling procedure, sample size, the procedure of collecting data and the accompanying data analysis are discussed. The discussion starts with the research method of CA, followed by the interview with the Manager of the Book Management Unit, ending with the interview with Managers of the publishing houses which have published textbooks that have been content analyzed.

4.4.1 Introduction of Content Analysis (CA) as a research method

Content Analysis has been discussed in detail. Definitions of CA as they have evolved overtime have also been given. The history of CA as research method has been traced. The changes in the method and its purposes over-time have also been discussed. Advantages and limitations in using the method have been discussed together with the ways of overcoming the identified limitations. Also discussed in this chapter are issues of validity and reliability in carrying out the study using CA as a data collection instrument in determining the depiction of gender roles in textbooks. Validity and reliability checks have been used as a way of overcoming the pinpointed limitations of carrying out CA.

To understand the application of both quantitative and qualitative operations in CA as a research method, a brief history of CA has been given. The development of CA shows that its application and purposes have grown over-time. Different authors such as Berger (1991) Berelson (1954), Holsti (1968), Kerlinger (1964), Krippendorff (1980) and Palmquist (1998) have traced its development. CA as a research method was already being utilized by 1940's. Initially it was limited to studies that examined texts for frequencies of occurrences of identified terms in word count. By mid 1950's researchers had already started to consider using more sophisticated methods of analysis, focusing on concepts rather than simply words and on semantic relations rather than just presence.

Prior to 1950's CA was mostly quantitative. From 1950's to date CA has mostly been both quantitative and qualitative. The concern has been with general impact of messages in the documents to the target population. All along CA has widely been used in media and advertising. Qualitative CA has been used to assess gender-role portrayals in advertising

(Holsti 1968). In the case of textbooks, researchers began using quantitative CA to investigate the extent and trend of gender role portrayals in the early 1970's. Studies done in the mid 1980's and early 1990's to date have used textbooks to examine the portrayal of gender roles using statistical and/or interpretative procedure to illuminate underlying patterns of the portrayal of gender roles.

4.4.2 Definitions of Content Analysis

Content analysis involves analyzing the contents of documentary materials such as textbooks and mass media. This is done by the identification and counting of certain characteristics of documentary materials and also by investigating the meanings of the underlying messages. The application of CA method in investigating gender roles in textbooks has therefore, been appropriate in this study.

Content Analysis has been defined in various ways by different authors such as Berelson (1954), Holsti (1968), Kerlinger (1964), Krippendorff (1980), Palmquist (1998) and Weber (1990). While these authors have defined it as it has conventionally/traditionally been used, other authors including Lincoln and Guba (1985) have challenged such definitions and have come up with improved definitions which highlight the role content analysis plays in modern times. Some of the definitions of CA include:

- A method that looks at the content of any communication device, in this case, primary school textbooks. It investigates both explicit and implicit messages by utilizing quantitative and qualitative means. The quantitative analysis looks at the presence or absence of male or female characters in the category being content analyzed in terms of illustrations or messages in the text/content,
- A systematic technique for compressing many words of text into fewer content categories (Berelson 1952, Krippendorff 1980 and Weber 1990; and
- A research method in which answers are categorized into different types and a number of each type is counted up. It is type of research method that involves numerical coding.

On the basis of the above definitions, the CA method involves establishing a number of different content categories and counting the number of times each of them occurs in a particular set of data. According to Berelson (1954), CA is a research technique for the objective, systematic and quantitative description of the manifest content of communication.

Winner and Dominick (cited by Palmquist 1998) have clarified the key concepts from the definitions given by different authors. According to them to achieve its goals, CA has to be **systematic** because it requires one set of explicit guidelines for CA and evaluation. This guide is used throughout a given study. **Objectivity** is also important in carrying out CA. This is based on the assumption that the researcher's values and biases become independent of analysis and evaluation. **Quantification** is usually necessary because it accommodates the goal of deriving accurate representations of a body of content. The researcher of this study feels that the above three characteristics – *systematicness, objectivity and quantification* are important in making data collection and analysis valid and reliable.

The definition of CA given by Kerlinger (1964) relates to observation. According to Kerlinger CA is a method of observation where instead of observing people's behaviour directly or asking them to respond to scales or interviewing them, the investigator takes the communications that people have produced and asks questions of these communications.

Holsti (1968) summarized the various earlier definitions of CA that were by then employed by researchers and defined CA as:

“Any technique for making inferences by systematically and objectively identifying specified characteristics of messages.”

4.4.3 Challenges to some definitions of Content Analysis

Some authors writing on content analysis and its applications to research have challenged the traditional definitions of CA. Lincoln and Guba (1985), for example, challenged the traditional way of just analyzing content that is manifest. CA according to Lincoln and Guba should not only deal with manifest characteristics but also deal with hidden messages. The other challenge posed is that content analysis should not be treated as a quantitative technique only. Lincoln and Guba (1986:242) in challenging the traditional way of looking at CA give the following reasons:

- The frequency of occurrence of characters is not necessarily related to the importance of this assertion;
- More meaningful inferences can occasionally be drawn from qualitative than quantitative methods; and
- Emphasis on quantifying of symbols and precision often comes at the cost of problems

significant.

It should be noted that while CA is guided by symbolic meaning of texts, it is necessary to make an in-depth consideration and relate the context to the empirical environment. It is argued that messages and symbolic communications are generally about phenomena other than those observed. The vicarious nature of symbolic communications is what focus a receiver of the message understands to make specific inferences from sensory data portions of his/her empirical environment. This empirical environment is what is referred to as context of the data.

4.4.4 The position taken in this study on CA

In view of the above discussions on content analysis as a research method both the explicit/manifest and the hidden messages have been content analyzed. The researcher has started from analyzing the quantitative aspects of the manifest content to qualitative aspects of hidden messages. Both explicit and implicit messages were investigated by utilizing quantitative and qualitative data collecting approaches. The quantitative analysis looks at the presence or absence of target words, images, messages and also illustrations in the case of this study. Qualitative CA on the other hand kept track of implicit or underlying meanings (PROMISE 2001 cited by Ozdogru et al (n.d). Questions were formulated to determine manifest and hidden messages. The questions have been based on chosen categories that have been representative of gender roles exhibited by the characters in the textbooks that have been content analyzed. Two stages of content analysis, namely quantitative and qualitative analysis have also been discussed with the accompanying respective quantitative and qualitative operations. The procedures involved in carrying out the study using the quantitative analysis, which led to steps in carrying out qualitative analysis have been covered.

4.4.5 Justification of using CA on the basis of its advantages

The justification for using CA for the study has to be considered from the view point of problem that is under investigation i.e. “How gender roles have been portrayed in primary school textbooks and hence the accompanying objective of determining the nature and extent of the depiction of gender roles in the textbooks?” The rationale for using content analysis is also based on the advantages of using this method and how best the limitations/disadvantages could be minimized. The advantages of using content analysis as a research method and ways

of overcoming the limitations are discussed in the following section.

4.4.5.1 Advantages of using CA

CA offers several advantages to researchers who consider using it. Different authors have documented both the advantages and limitations of using CA as a research method (Berelson 1952, Krippendorff 1980, Palmquist 1998 and Weber 1990). The following are some of the advantages of using CA particularly in relation to the study of the depiction of gender roles in textbooks:

- It enables researchers to sift through large volumes of data with relative ease in a systematic fashion. In this study 40 primary school textbooks were content analyzed;
- It looks directly at communication via texts or transcripts, and hence gets at the central aspect of social interaction between males and females as depicted in gender roles. As regards to textbook writers, it has been argued that in most cases authors of textbooks write related ideas that prevail in the given society;
- Content analysis can allow for both quantitative and qualitative operations hence using the strengths of both approaches while at the same time addressing the weaknesses of each type of operation;
- It can provide historical/cultural insights over time through analysis of texts and thus being useful for examining trends and patterns of documents. It permits the study of processes occurring over a long time. In the sample of this study, for example, there were textbooks that were published in 1981 and later revised in 2000. Content analysis provides an empirical basis for monitoring shifts in writing textbooks and in this case the portrayal of gender roles. Data collected in the 1990's can be objectively compared to data collected at some point in the future to determine if policy changes of the Education and Training Policy of Tanzania on textbooks and relations to the standard-based reform have manifested themselves;
- It allows closeness to a text which can alternate between specific categories and relationships and also statistically analyzes the coded form of the text;

- It can be used to interpret texts for purposes such as the development of expert systems (since knowledge and rules can both be coded in terms of explicit statements about the relationships among concepts);
- It is unobtrusive, meaning that a researcher can observe without being observed. It can have no effect on the subject being studied. It has the attractive features of being unobtrusive in analyzing interactions;
- CA provides insight into complex models of human thought and language use;
- It is a useful tool for gathering data on a variety of topics. Such topics can relate to documents on political debates, campaigns and mass media including TV and newspapers;
- The data gathered is usually of high ecological quality;
- Data is in permanent form and can be subjected to reanalysis, allowing reliability checks and the replication of studies. When done well, CA is considered as relatively "exact" research method (based on hard facts, as opposed to Discourse Analysis);
- It provides a low cost form of longitudinal analysis when a series of documents of a particular type is available; and
- It is economic in terms of both time and money.

4.4.6 Limitations of using CA

Apart from the discussed advantages of CA the method suffers from several disadvantages, of both theoretical and procedural nature. Limitations of using CA and how some of these limitations can be minimized in carrying out the task are highlighted in the following discussion:

- In most studies that employ CA as its research method oftentimes, there is an acknowledged weakness of the sample size not being representative and therefore, not allowing the findings to be generalized. To overcome this weakness all pupils' textbooks used in government primary schools have been used. The 40 primary school textbooks constitute "population" of the study;
- Content analysis is said to be subject to increased error in data gathering, analysis and interpretation. This is particularly so when qualitative analysis is used to attain higher

levels of interpretation. To overcome this limitation, reliability and validity issues/checks have been instituted in the design of CA instruments, the coding system and data interpretation;

- Content analysis tends too often to simply consist of just a word or a picture, which is too quantitative. In this study both quantitative and qualitative analyses have been used to overcome this problem. Content analysis has thus gone beyond the quantitative aspects of the findings to qualitative analysis;
- Content analysis oftentimes disregards the context that produced the text, as well as the state of things after the text was produced. To address this weakness in examining the depiction of gender roles over a period of time, analysis and interpretation have taken into consideration the context under which textbooks were written. The use of interviews of other stakeholders in the production of textbooks supplemented this method;
- It is limited to the examination of recorded communication;
- It is often devoid of theoretical base, or attempts too liberally to draw meaningful inferences about the relationships and impacts implied in a study. Liberal feminist theory has been used in the content analysis exercise;
- Content analysis can be difficult to automate or computerize. This has been the case where the use of paper and pencil /hand coding has been the procedure, thus making the work extremely time consuming. Initially the researcher consulted computer specialists who suggested the use of the OpenCode computer programme. Later on the computer specialists recommended the use of paper and pencil hand. According to these specialists, coding would be more appropriate compared to the use of the pre-arranged coding computer programme. It should also be noted at the same time that, hand-coding has some advantages as it assists in tracking down errors during the proceedings of coding and recoding (Palmquist 1998);
- The analyses are open to subjective interpretation; thus making the process quite subjective, therefore, decreasing consistency. Subjectivity can be minimized by ensuring that the research gathering instruments are reliable and valid;
- The documents available may be limited and partial. This was not the case with textbooks content analyzed as these were available in almost all government primary schools and book stores in Tanzania; and
- The utilities of CA are destroyed if definitions of categories are faulty and non-mutual exclusiveness and exhaustiveness of categories does not exist.

In order to address some of the limitations, some ways of overcoming weaknesses in using CA as a research method are discussed in details in sections 4.4.15-4.4.17. In these sections reliability and validity issues are addressed.

4.4.7 Selection of the textbooks content analyzed

In this section a brief description on the selection and size of the sample of textbooks used in this study is given. The population frame from which the sample of textbooks was drawn is also indicated. The study was restricted to primary school textbooks used in government primary schools during the transition period from single textbook to multi-textbook system, 1996-2002. In this study all textbooks used in government primary schools were picked for content analysis to determine the portrayal of gender roles in these textbooks. There was no sampling of textbooks as all textbooks/elements of the population being studied were included in the study. The textbooks content analyzed were used in schools with a population of over 6 million pupils (MOEC 2004) that follow the primary school curriculum developed by the Tanzania Institute of Education (TIE). The textbooks have been written to fulfil the aims and objectives of primary school curriculum and have been drawn from Mathematics, Social Studies, Science, English, Kiswahili (the National language), and Vocational Skills subjects.

4.4. 8 Population size of textbooks content analyzed

The number of textbooks that were content analyzed was 40. These make up all textbooks that are currently in use in the six subjects taught in primary schools from grade one to seven. Table 4.1 shows the number of textbooks that have been content analyzed in the six subjects taught in government primary schools in Tanzania.

Tables 4.1 Number of textbooks content analyzed and the grade used

Name of Subject	Number of textbooks for each grade (1-7)							Total
	Grade							
	1	2	3	4	5	6	7	
Kiswahili	2	2	1	1	1	1	1	9
Mathematics/Hisabati	1	1	1	1	1	1	1	7
English	1	1	1	1	1	1	1	7
Science/Sayansi	1	1	1	1	1	1	1	7
Social Studies/Maarifa ya Jamii	–	–	1	1	1	1	1	5
Vocational Skills/Stadi za Kazi	–	–	1	1	1	1	1	5
Total	5	5	6	6	6	6	6	40

The 40 textbooks have been content analyzed to determine the depiction of gender roles

4.4.9 Identification of categories for CA

According to Weber (1990) the essence of CA is categorization. A category is a group of words with similar meaning or connotations (Weber 1990). A content analysis describes a set of data in terms of a set of categories and how many examples have been counted in each category. Both explicit and implicit terms are identified for coding purposes. The terms relate to the selected categories that portray gender roles in the textbooks.

The determination of categories for CA in this study was therefore based on approaches to coding data namely, priori coding and emergent coding (Stemler 2001). This study used both priori and emergent approaches in the coding procedures. In priori coding, categories are established prior to analysis based on theory and in this case the liberal feminist theory. Researchers and authors of CA of gender and textbooks have agreed on such categories and hence coded the portrayal of gender roles in instructional materials including textbooks. The professional researchers and authors whose categories have been adapted include the UNESCO study by Michel (1986), the Commonwealth study by Davies (1995), the study of women images in Kenya primary school textbooks by Obura (1991), the FAWE ABC guidelines by Kabira and Masinjila (1997) and National commission on the role of Filipino

women (1999). It was also important to review and contextualize the categories these researchers and authors used in content analyzing of gender sensitivity of instructional materials in their studies.

As Palmquist (1998) correctly argues, the selection of categories for content analysis would very much depend on the kind of materials being content analyzed and the objectives of the researcher in a given study. For example, Davies (1995) in the Commonwealth study on 'Gender Bias in School Text Books' selected *visibility*, *stereotyping*, *equal respect*, *inclusive gender sensitive vocabulary* and *authority* as categories for CA. On the other hand Michel (1986) in a UNESCO study on 'Eliminating Sexism from Children's Literature and School Textbooks' picked *content/slurs in language*, *stereotypes* and *inadequate representations* as categories for the study. Other researchers who include Obura (1991) and Sadker and Sadker (1991) have used different but related categories to *images*, *sexism* and *gender bias* in instructional materials.

Some of the elements of emergent coding were used in establishing the categories and sub-categories used in the study. Emergent coding called for some preliminary examination of the portrayal of gender roles to female and male textbook characters to be coded. In determining the type of categories, therefore, it was important to gain an initial general impression of the textbooks as a whole, as regards the portrayal of gender roles before picking the precise categories and sub-categories for investigation. Using different sources such as Bem Sex Role Inventory (BSRI), dictionaries and reliability coders, revisions were made to tighten the categories in order to ensure mutual exclusiveness and inclusiveness of the meanings of the categories and sub-categories.

In the bid to identify the portrayal of gender roles that account for hidden curriculum in primary school textbooks using selected categories, this study content analyzed both the portrayal of gender roles in the illustrations and the texts. The most important categories and the notions that were content analyzed were identified. The categories chosen were relevant and appropriate to the research interest based on the objectives of the study. The selected categories used in the examination of the portrayal of male and female characters to gender roles are discussed below.

The categories that were selected to examine the portrayal of gender roles in textbooks in this study included:

- Frequency of occurrence/appearance of female and male characters;
- Reproductive/maintenance, productive, community activities/roles;
- Occupational roles;
- Power in relation to:
 - ownership of property,
 - association with and use of technology, and
 - leadership roles;
- Personality traits/characteristics and personal capabilities; and
- Use of biased language.

4.4.10 Description of each category for CA

In content analysis it is important to make sure that the meanings of categories are inclusive and exclusive (Stemler 2001). This ensures reliability in coding of gender roles as presented in textbooks. The following is a brief description of each of the selected categories (Kabira and Masinjila: 1997 and the National Commission on the Role of Filipino Women (1999).

4.4.10.1 Frequency of appearance of female and male characters

In order to determine the appearances of male and female characters in terms of frequencies, percentages and ratios were examined and compared. The frequency of appearance of illustrated and textual female and male characters was determined by counting them. The invisibility, exclusion or under representation of female or male characters in the portrayal of gender roles was looked into. The depicted male and female characters were compared to gauge the group of people (males or females) who were presented as invisible by being under represented or omitted altogether. If females or males as a group were underrepresented or omitted, this denoted features of a gender biased textbook (Grossman 1994, Scot and Schau 1985). In view of the female and male population in Tanzania being almost equal, ideally the presentation of female and male characters in textbooks should also be about equal if gender equity in the teaching and learning processes has to be realized. The under representation or omission of male or female characters does not indicate the only feature indicating gender bias in a textbook, stereotyped pegging of female and male characters in textbooks in carrying out reproductive, productive and community roles are other features of gender

biased textbooks. The following section provides a brief discussion on reproductive, productive and community roles as categories for CA in this study.

4.4.10.2 Reproductive, productive and community roles

Reproductive or maintenance activities are roles that are usually performed at the home for maintenance of the family. Examples of such domestic tasks in the home include housekeeping activities that involve cleaning (dusting, sweeping and polishing) sewing as well as cooking and related activities of shopping and food preparation; collecting water, nursing children, cooking and fetching firewood. The activities also involve the care and maintenance of the household and its members including bearing of and caring for children. While the reproductive work is crucial for human survival, yet it is seldom considered "real work" and usually these are not paid for. In poor communities reproductive work is for most part manual, labour intensive and time consuming. Traditionally, reproductive work is in most cases the responsibility of women and girls. CA of the depiction of male and female characters in textbook was done in order to determine:

- If reproductive activities were stereotyped and associated with one gender (Deliyanni-Kouimtzi 1992); and
- If one type of gender (female or male characters) were depicted in unremunerated tasks in, around, and outside the home (Obura 1992).

Productive activities are roles carried out to produce goods and services for the generation of income. The produced goods are for consumption and trade. Such activities include economic tasks such as farming, manufacturing and fishing, wage employment and self-employment. Researchers have tried to identify patterns of gender role differentiation embodied in textbooks. Both male and female characters are presented in productive activities but for the most part, their functions and responsibilities will differ according to the traditional gender division of labour. The spheres of people's activities have been rigidly divided into either masculine or feminine. CA probed the portrayal of gender roles to determine, among other issues:

- The frequency of adults of both sexes who were involved in carrying out different productive activities;
- If a specific gender was presented in a wide range and diverse occupational roles;

- If productive roles were assigned to female and male characters according to what was considered socially and culturally appropriate;
- If characters were assigned to gender stereotyped traditional roles;
- If productive activities portrayed to male and female textbook characters have been of equal value to both genders;
- If characters were more restricted and less varied, based on gender (Michel 1986);
- If the general trend on the portrayal of occupations to male and female characters were differentiated; and
- If the pegging of employment and professional careers were differentiated according to gender.

Community roles are activities done for general community welfare. Such activities include attending meetings, funeral related activities, church activities and neighbourhood meetings. These activities, like those within the reproductive sphere, are not remunerated to those carrying them out. The pegging of political and social roles is differentiated between male and female characters.

4.4.10.3 Power category

Power relates to the depicted positions male and female characters hold in society. According to Kabira and Masinjila (1997) social gender relations are kept in place by prevailing power structures that can be observed in textbooks. Different researchers and authors have classified types of power (French and Raven 1959 cited in Gender Roles 1997 and Longwe 1991 as cited in UNICEF 1995). Types of power include those of decision making in various situations that call for leadership, ownership of property / wealth and the use or association of characters with modern technology and skills. Ownership of property/wealth, for example, is one of the indicators of the individuals' social and financial status in the community, and is associated with power. There are different types of power. French and Raven (1959) cited in Gender Roles (1997) categorize the following types of power as *reward*, *referent*, *legitimate*, *expert*, and *informational*. Visible power depends on how each type of power is being exercised. According to Longwe (1991) cited by UNICEF (1995) the visible power culminates with the empowerment of an individual in decision making process.

In this study, the content analysis of the power category has used three sub-categories to peg female and male characters to:

- Ownership of property/wealth;
- Use of technology/modern skills; and
- Leadership positions held by male and female characters.

There are several ways that can be used to determine biased depiction of social and political roles to female and male characters in relation to power possession. Such ways include:

- Depiction of patterns of ownership of goods and property by male and female characters;
- Portrayal of holding leadership roles/positions of males and females, hence differentiation of those depicted in leadership positions and those who are followers; and
- Male and female textbook characters presented in possession of information, skills, and in association with technology.

4.4.10.4 Personality traits/characteristics

Personality traits of characters in textbooks are depicted in textbooks by how male and female characters are positively or negatively described by writers. The characters can be described in a traditional manner of masculinity, femininity or being androgynous. Areas of behaviours/personality traits that were considered included those related to:

- Personality and temperament;
- Prosocial behaviours which include affiliation, empathy, nurturance and altruism; and
- Power related behaviours, which include aggressiveness (physiological and social), assertiveness, dominance in terms of leadership and intimate relationship, competitiveness and gender appropriate achievements.

Content analysis aimed at determining if personality characteristics were stereotyped into traditional categories of masculinity, femininity behaviours or androgynous.

4.4.10.5 Gender biased language

Elements of gender-biased language in textbooks include linguistic bias, masculine generic constructions, and use of generic language. According to Mosley (n.d.) linguistic bias is defined as the use of language as a conveyor of biases and negative attitudes about a particular group. In this study, gender linguistic bias relates to males and females as a group.

A masculine generic construction is a concept defined as fixed expressions for “all” that tend to be male. “Generics” imply that a word such as “he” “man” “businessman” are used generally to refer to both females and males (Njabili in Obura 1994). In CA of gender roles the issues raised as regards gender biased language were:

- Whether the language used perpetuated gender bias;
- Whether the language used was demeaning, implied less significance, trivialized and propagated stereotypes on female and male characters; and
- Whether gender sensitive inclusive vocabulary that meant to be gender neutral was used (Kabira and Masinjila 1997 and Obura 1991, 1994).

In order to have an in depth understanding of the portrayal of gender roles of male and female characters, it was important also to note where actors were depicted operating from and also if the characters were depicted as active or passive. The discussion of the two issues is done below.

4.4.11 The interplay between categories and loci where characters operate

The location/environment where actors are depicted to operate very much assists to determine gender stereotyping of female and male characters. The portrayed loci also assist the determination of active and passive characters. The depicted locus where characters of each sex carry out activities can for example, be inside and outside the home. The place where characters act has been particularly useful in analyzing accurately the presentation of gender roles in textbooks (Kabira and Masinjila 1997). This is also helpful in the carrying out of qualitative analysis of gender roles in textbooks. The qualitative analysis brings out, among other things, the advantages of operating from a certain environment as opposed to others. Certain places such as the kitchen may be despised as both the reproductive and productive activities carried out in the kitchen are not remunerated. Non-remuneration of the carried out activity is one of the reasons leading to an activity being assigned to a low status (Kabira and Masinjila 1997:16).

4.4.12 The portrayal of characters being active or passive

In determining the portrayal of characters in carrying out different activities, a character is considered either active or passive. According to Potter and Rosser (1992) cited by Koza

(1994) a passive person was taken as merely observing or having something done to them. An active person on the other hand is a person involved in an activity such as experimenting or sports. It is important that the active and passive dimensions of the portrayal of characters also consider indirect forms of gender stereotyping. In looking at such dimensions in CA the following issues were addressed in the study:

- Were female and male characters portrayed in active situations, but in limited stereotyping roles such as nursing or work in traditionally feminine occupations (Gupta and Yin 1990); and
- Were female and male characters on the other hand depicted in passive stance but nevertheless in positions of power, control and responsibility? Which gender was portrayed in activities that were empowering (Mullins and Gunst 1985 and Barn 1988) cited by Basow (1993);

In order to systematically determine the portrayal of gender roles in each of the above selected categories questions, instructions and the coding instruments were designed. The content analysis guide and coding instrument are found in Appendix B.

In developing the content analysis guide and the coding system, issues of validity and reliability were addressed. The concepts of reliability and validity are important in applying content analysis as is the case with other research methods. The following section discusses validity and reliability concepts as they relate to content analysis.

4.4.13 Validity issues in CA

Validity as a concept in research applies to all types of research instruments (Palmquist 1998). Validity at a general level is the determination of whether or not a measurement actually measures what it is purported to measure. In content analysis, validity is also associated with the identification of categories for content analysis and the agreement of coders to the meaning of terminologies related of the selected categories.

In determining the validity of the instrument therefore, one of the first steps was to read all the textbooks in the sample and come up with a master list of portrayed behaviours exhibited by textbook male and female characters. These behaviours in all categories were then rated by three raters into masculine, feminine and androgynous classifications using various techniques and arrived at an agreement upon the meaning as they relate to masculine,

feminine and androgynous gender roles in the categories and subcategories that were analyzed.

To ensure validity, therefore, the issue of coders' agreement on the meaning of terminologies used in the identified categories and the accompanying sub-categories, analysis and coding was taken into account. Palmquist (1998) in explaining validity issues in content analysis says that to achieve validity multiple classifiers have to be utilized and the classifiers arrive at an agreement upon the meanings/definitions of the category. An agreement of the categories to be analyzed has some advantages. One of the advantages of ensuring validity of the content analysis instrument was to ensure that the socio-demographic characteristics of the researcher did not very much affect the analysis of accounts.

The procedure used to reach consensus by researchers in content analysis was the use of individual ratings, developed inventories such as the Bem Sex Role Inventory (BSRI) and dictionaries. In case of categories in relation with gender roles, such behaviours exhibited by the male and female characters were classified by coders into masculine, feminine and androgynous classifications. In discussing the findings on the depiction of gender roles in textbooks, this classification was also strengthened by the use BSRI inventories, which have already been developed as a means of determining the level of masculinity, femininity and androgyny. The BSRI is an example of such inventories. BSRI was developed in 1974. BSRI and dictionaries have been used to strengthen the ratings of three individuals to ensure validity of different items in the categories that have been analyzed.

A discussion followed on the classifications by the coders so as to arrive at a consensus on the meaning of the compiled behaviours related to the categories. The behaviours that have been classified by the raters and the outcome of their classification are found in Appendix A.

4.4.14 Reliability issues in CA

At a general level reliability can be defined as the extent to which a measure, procedure or instrument yields the same result on repeated trials. In content analysis reliability refers to the stability for coders to consistently re-code the same data over a period of time (Palmquist 1998). It is important that the coding procedure be reliable in the sense of being consistent (Weber 1990). Different people should code the same text in the same way. To ensure reliability, data analysis and coding have to take account the coders' agreement in the coding

system.

According to Reinharz (1982) an agreement of the selected coders has to be made at 0:70 and 0:80 coefficients. Kerlinger (1986) on the other hand argues that the coding system for content analysis has to be refined until the criteria of the reliability coders are reached on 85% of the selected categories. Gottschalk (1995) cited by Palmquist (1998) cautions over the issue of reliability being complicated by the inescapably human nature of researchers. On the basis of this agreement, he suggests that coding errors can only be minimized and not eliminated. According to Gottschalk, 80% is an acceptable margin of reliability for coders.

4.4.14.1 The rationale of intercoder reliability

Different researchers have discussed the importance of intercoder reliability in carrying out content analysis (Holstri 1978, Palmquist 1998, Krippendorff 1980 and Weber 1991 among others). Before outlining the steps involved in intercoder reliability, the meaning and importance of inter coder reliability are given. Intercoder reliability, also known as interrater agreement, is a widely used term to denote the extent to which independent coders evaluate characteristics of a message or artefact and reach the same conclusion (Weber 1990 cited by Steve 2001). Interrater agreement is needed in CA because it measures only “the extent to which the different judges tend to assign exactly the same rating to each object” (Tinsley and Weiss 2000 cited by Lombard et al 2004). Interrater reliability is important in various ways including the fact that its proper assessment makes coding more efficient and that without it all work in the process of data gathering, analysis and interpretation is likely to be dismissed by sceptical reviewers and critics.

4.4.14.2 Content Analysis Guide and the Coding System

In order to come to an agreement in the coding system, the researcher designed a content analysis guide and the accompanying coding system, which was used by the reliability coders. The developed content analysis guide and the coding sheets/system were tested for reliability before using it in full scale content analysis of the textbooks of the sample of the study. Based on the selected categories, questions were developed to guide the examination of the depiction of gender roles.

To facilitate the coding of concepts within selected categories, questions were designed and applied to each category. These questions were classic questions of communication research

which involve questions like, who says what, to whom, why and with what effect (Kabira and Masinjili 1997). The questions assisted in coding for frequency where the number of concepts appeared. Frequency coding assisted the researcher in making interpretations of some kind later, when probing in-depth qualitative meanings of the portrayed relationship between female and male characters on the depiction of gender roles. (The content analysis guide and the coding instruments are found in Appendix B).

4.4.14.3 Sampling procedure and size of reliability sample

Purposive sampling was the procedure used in the creation of the reliability sample of the six textbooks pilot tested. Each of the selected textbook was from the six subjects that were by then (2000-2004) taught in Tanzania government primary schools. These textbooks were deliberately picked to ensure that they were from six different publishers out of nine publishers in the sample of publishing houses. By picking different publishers, it was predicted that specific trends could be determined on how the publishers treated the portrayal of gender roles in the production of textbooks. The textbooks were for grades 1, 2, 3, 4 and 7. It was not important to base the selection on grades as in most cases the members of the writers panel for each subject were the same for all grades. Since the subject panel of writers of textbooks for grades one to seven were the same people it was likely that the depiction of gender roles in the textbooks would be the same in the given subject from grade one to seven.

The following are textbooks in the reliability sample that were pilot-tested to ensure the reliability of the coding instruments:

- *Kusoma: Kitabu cha Kwanza (1)* .2000. (Tanzania Publishing House);
- *Sayansi 2: Kitabu cha Mwanafunzi: Darasa la Pili*. 2000. Mture Educational Publishers Limited;
- *Maarifa ya Jamii kwa Shule za Msingi: Darasa la 3*. 1996. (Educational Books Publishers Ltd.);
- *English for Primary Schools: Pupil's Book 4* 1997 (Oxford University Press, Tanzania);
- *Hisabati: Shule za Msingi: (3)* (Ben and Company Limited); and
- *Stadi za Kazi: Kitabu cha Mwanafunzi: Darasa la Saba* (Aidani Educational Ltd).

It should be noted that the relationship between the reliability sample and the full sample was that the reliability sample of six textbooks was the same as the full sample of 40 textbooks.

According to Lombard et al (2004) the reliability sample can form part of the full sample. As one of the study objectives was to create a baseline data for future related studies on gender and textbooks, combining validity sample with the full sample was therefore a rational decision.

4.4.14.4 The selected index to calculate intercoder reliability

The selection of an appropriate minimum acceptance level of reliability for the index to be used in studies has been discussed by different researchers and authors. They suggest different criteria of coders' agreement. In suggesting the indices, the rationale for such suggestions has been put forward (Palmquist 1998, Reinharz 1982 Kerlinger 1986 and Neurndolf 2002).

In communication the most widely used indices are percentage agreement (Lombard 2004). This seems to be used widely because it is intuitively appealing and is simple to calculate especially when the calculations are done by hand. The methodological literature is however consistent in identifying it as misleading measure that overestimates true intrercoder agreement (this is especially true at least for nominal level variables). The researcher decided to use intercoder percentage agreement of 90% being the minimum intercoder reliability. This percentage agreement of calculating interrater agreement did not involve software tool. The calculations were based on examples provided from Neurndolf (2002) who includes a useful set of examples that illustrate the step by step calculations for percentage agreement- These are the Scot's pi, Cohen's kappa and the nominal level version of Krippendorff alpha.

In view of the above arguments, as regards the appropriate intercoder percentage agreement, the 90% of coders' agreement has been selected as the minimum percentage agreement of the study. This percentage was deemed reliable and it was therefore, concluded that the coding scheme with the 90% of coders' agreement would provide a high enough reliability to permit the carrying out of the coding and analysis task of all the sampled textbooks. According to Lombard et al (2004), higher criteria should be used in indices known to be liberal (using percentage agreement). It is at the same time argued that researchers using coefficients .90 or greater are nearly always acceptable; .80 or greater is acceptable in most situations and .70 may be appropriate in some exploratory studies (Lombard 2004).

In order to enhance the reliability of the CA, three reliability coders, excluding the researcher

were selected to test the reliability of coding instrument. These reliability coders, content analyzed six selected textbooks out of the 40 textbooks in the sample of the textbooks using the already designed coding guide and coded manifest gender roles portrayed in the textbooks. The three reliability coders who were selected to content analyze the six textbooks were purposively picked. The criteria used for selecting the three individuals were on the basis of not only being experienced teachers but they had also shown interest in issues of gender and education. Of the three reliability coders, two were curriculum developers (a female and male) who had been practicing teachers and the third reliability rater was a female secondary school teacher.

4.4.14.5 Orientation of coders to reliability coding

In order to ensure consistency and coherence in the coding system by the reliability coders, appropriate/proper orientation was carried out on how to use the content analysis guide and the accompanying coding instrument/scheme. The researcher and the reliability coders went through the guide and the coding instrument. Clarifications were made on the coding guide and instrument, and ambiguities were removed from the research instrument. Together, but independently, coders and the researcher practiced coding of some parts of the textbooks in the sample to get an insight of the data collecting instrument and become acquainted with the coding rules/guide. The orientation of reliability coders on the CA guide and use of the coding scheme lasted six hours in two days.

Reliability interrater coding guidelines/rules were explained to the three reliability coders in validation of the research instrument during the coding orientation. The following guidelines were provided to the reliability coders for reference purposes:

- Coding was done independently and without consultations or guidance. Each of the coders was required to code gender roles individually using the developed guide and the coding instrument;
- The traits were to be recorded based on holistic approach of portrayals of gender roles. Concepts were to be recorded as they appeared in different forms. If a textbook character exhibited any of the relevant traits, the trait would be checked once for the character, regardless of the number of times she or he expressed the character traits. Thus in the coding scheme, a character who was described as crying in two sentences was not considered twice as emotionally expressive as a character who was described as crying in

one sentence. Each character would simply be regarded as emotionally expressive. On the other hand, the name John may appear in different problems in mathematics textbook performing different activities such as buying, cooking and building, in this case John would be recorded with three frequencies as these might be three individuals (3 different Johns). This would not be the case in a given story where, for example, Amina who is depicted as the main character appears throughout the story. The main character would only be recorded once;

- It should be noted at the same time that the application of holistic approach did not only apply to content in the text but also the illustrated characters. For example, the illustrated Zainabu (female) was depicted several times demonstrating soccer skills within the same chapter, she would be recorded once, regardless the number of times she would be illustrated;
- On completing the work, the findings were compared to determine the intercoder reliability of the coding instrument; and
- Disagreements in reliability coding were resolved through discussion on completion of the coding by reliability raters.

4.4.15 The actual coding by the researcher

The intercoder reliability level for each category for each index selected was calculated. Composite reliability percentage agreement was therefore, computed to determine inter-coder reliability where coders agreed with the coding system. The coding system for CA was refined until the orientation of three coders was arrived at between 90% and 95% of the different categories assigned to particular textbooks. The researcher proceeded to content analyze the full sample of 40 textbooks after concluding that reliability in the pilot test was adequate.

Content analysis was conducted by human hand coding and not by computer coding as was the procedure used by reliability coders. The approach to content analysis was descriptive. The researcher read the textbooks in the sample and manually wrote down the occurrences of gender roles using the CA guide and the coding instruments. Manual coding had the advantages of helping the researcher to recognize errors more easily as the coding progressed. The coding system used by the researcher had already been tested by the three reliability coders in terms of its reliability/validity. The information content analyzed was presented as a

summary table, with the categories forming the columns and the form of data forming the rows. The numbers, which appear in the cells of the table, were the frequencies which were a result of counting up how often that category occurred in the data set. On the basis of the combined data, after coding, conclusions were drawn and also the making of possible generalizations.

4.4.16 Concluding remarks on CA

A long account on content analysis as a research method has been given necessarily because researchers in Tanzania do not commonly use it. The researcher came to realize this when searching for examples from studies on procedures involved in doing CA in libraries especially that of the University of Dar es Salaam (being the largest and oldest university in Tanzania with many research reports).

After discussing the first research method of content analysis the following section gives a detailed description of the second research methodology of the study, the two interviews with publishing houses and the Book Management Unit of the MOEC.

4.5 Background Information of Interview as a Research Methodology

Interview guidelines are considered most appropriate in studies in education (Borg 1983). Interviews permit a more thorough understanding of the respondents' opinions and provide a desirable combination of objectivity and depth. Semi-structured interview schedules often permit the gathering of valuable data that could not be successfully obtained by any other research approaches. It should be noted however, that while the method has its advantages it has also some limitations. In the following section the advantages and limitations of using interviews are discussed.

4.6 Advantages of Using Personal Interviews

While personal interviews as a research method are considered to be the most costly form of data collection in general (Witley 1996) they however, offer important advantages. These include:

- The ability of the interviewer to notice and correct the respondent's misunderstandings in the process of interviewing;

- Probing those responses that are inadequate and vague;
- Answering questions and clarifying concerns of the interviewees;
- Unlike the questionnaire, an interview enables the interviewer to control the order in which the respondent receives the questions. A response to an interview item influenced the interviewer to reset a question that was asked; and
- Attaining the highest response rate when compared with other survey techniques.

4.7 Limitations of Interviews and How to Overcome Them

Apart from the listed advantages of using interviews, there are also some limitations that the researcher had to find ways of overcoming them. These limitations and how the researcher overcame them are discussed as follows:

In the first place, face to face situation between the interviewer and interviewees in an interviewing encounter has the tendency for respondents to give invalid socially desirable answers to suit the interviewer's expectations or desires. In order to minimize these tendencies, the researcher as much as possible translated the why questions into how questions. This was done in order to get explanations of processes rather than justification in publishing activities as far as gender roles were concerned.

As has been stated, the biggest disadvantage/limitation of using interviews is the cost involved in carrying out such interviews, which is usually enormous. This cost element is largely heavily dependant on the size of geographic coverage of the study. In carrying out interviews in this study, the geographical coverage was within the city of Dar es Salaam. The BMU and the publishing houses were situated in Dar es Salaam where the researcher also resides. The distance from the place where the researcher resides to the city centre where the BMU and most publishing houses were situated was about 15 km. These places were easily accessible by public transportation and were thus relatively cost-effective.

4.8 Publishing Houses Involved in the Study

Nine publishing houses that were involved in the production of textbooks during the PPP Project were included in the sample and was the population of the study. These publishers

produced textbooks that have been content analyzed in this. Managers of these publishing houses were interviewed to determine the mechanisms that these houses had instituted in order to eliminate gender stereotyping in textbooks as required by the Education and Training Policy in as far as gender issues are concerned in the schooling process.

The BMU, the unit for the MOEC responsible for the coordination of the production of primary school textbooks was deliberately/purposively picked for the interview, which involved the Manager of BMU. The BMU was purposively included in the sample as it is the only MOEC's unit responsible for monitoring the production of quality textbooks as per requirements of MOEC policy on the production of textbooks that are free from gender stereotyping.

4.9 Development of Interview Schedule

Two semi-structured interview guides were developed by the researcher and these were administered to solicit information from the Book Management Unit of the MOEC and publishing houses in relation to mechanisms that were instituted to eliminate gender stereotyping of school textbooks. Each of the data-collecting instruments was therefore, developed with the study objectives in mind.

A semi-structured interview with the managers/editors of publishing houses addressed the following four main areas:

- Activities that the publishing house were involved in during the pilot project for publishing;
- What the house gained to empower itself in the production of textbooks;
- The mechanisms instituted by the publishing houses to get rid of gender stereotyping in the production of textbooks as a requirement in the Education and Training Policy of Tanzania; and
- The relationship between the publishing house and other institutions involved in the production of textbooks.

This, however, was not the case in administering the interview with the Manager of the BMU, as it was the only institution of the MOEC charged with overseeing the production of textbooks to the required standards ready for use in primary schools.

A semi-structured interview was designed to solicit information from the Manager of the BMU on policy issues in relation to production of quality textbooks which included the elimination of gender stereotyping from textbooks. The interview guide dealt with the following major areas:

- Mechanisms in place to eliminate gender stereotyping in textbooks i.e. the production of guidelines to avoid stereotyping in educational materials; and
- The role of BMU in training of stakeholders involved in the production of textbooks in order to adhere to MOEC standards;
- The new Approval System of Educational Materials in relation to the production of quality textbooks based on MOEC standards;
- BMU's future plans to write gender friendly textbooks.

4.10 Issues of Reliability and Validity in Using Interviews

In order to determine the reliability and validity of the interview guides the instruments were pilot tested. The rationale for carrying out pre-testing of these interview guides included the following:

- To try recording techniques;
- To check the appropriateness of the research instruments in soliciting the required information. Appropriateness included checking if the language used in the interview guide items could be understood by the respondents and the respondent's reactions to the guide;
- To provide an opportunity to detect and remove ambiguities and noting vague questions from the interview guide items and by so doing improving the research instruments on the observed weaknesses;
- To provide an opportunity to determine the extent to which the items (questions) in the interview guide covered the intended ground that was being investigated;
- To find out the best procedures to be adapted when carrying out the actual study and hence improving data collecting routines / procedures; and
- To determine the time taken to complete the interview.

4.10.1 Procedures in pilot testing of the interview guides

Upon completion of the design of the data collecting instrument and before each instrument was applied to the entire research population, the instruments were pilot-tested. The testing closely followed the procedures planned for the main study. The procedures used to pilot test the two interview guides, however, differed as a result of the size of sample used. While there was one person to interview from the Secretariat of the BMU, the procedures differed with interviewing managers/editors of publishing houses. As part of the validation of the interview guidelines peer validation was therefore used.

4.10.2 Peer validation of the interview guidelines

As part of the validation of the interview guidelines, the researcher involved colleagues/peers from the Faculty of Education of the Open University of Tanzania to examine drafts of the interview schedules. These colleagues gave their opinions on whether the interview guidelines were clear enough to solicit the required data and whether they identified any items that needed to be included that might have been overlooked by the researcher. In incorporating the suggestions from the colleagues the instruments were thus improved. The interview schedules for the publishing houses and for the BMU are found in Appendix A and B respectively.

4.10.3 Pilot testing of the interview guide for publishing houses

The interview guide/schedule of publishing houses was administered to three out of the nine publishing houses. The three houses were deliberately chosen so that the respondents who were acquaintances to the interviewer could readily assist in improving this data collecting instrument. The researcher himself administered the interviews. At first it was thought that two data recording techniques of note taking and tape recording could be used to all respondents. This was however, not the case with all the three publishing houses pilot tested. One out of the three interviewees did not wish to be recorded on tape. These findings on the procedure in carrying out the actual interviews with the rest of the sample assisted the researcher to ask the interviewee first on his/her willingness to be recorded on tape, when making an appointment for the interview.

During the pilot testing it was also noted that when making appointments for carrying out interviews some interviewees preferred to be provided with the interview guide before hand. The rationale given by the interviewees was that, by being provided with the guide, the

respondent would be in a better position to dig for the required information before hand. The request was also based on guarding against impromptu irrelevant discussion.

The pilot testing of the interview schedule assisted the researcher to perceive the atmosphere of the interview encounter before carrying out a full-scale study. The tryout helped to check respondents' interpretations of the items of the interview guide. The pilot testing of the interview schedules was fruitful in the following ways:

- Vague questions were clarified;
- The amount of time necessary or taken in carrying out the interview was determined to be 30 to 45 minutes; and
- Useful comments given by interviewees were incorporated in the final interview guide which, was therefore, rewritten.

Based on the findings from the pilot study, the interview guide instruments were improved. The revised version of the interview guide that was used for managers/editors of publishing house is found in Appendix 3.

4.11 Ethical Issues in Administering of Interviews

Many research efforts that include interventions involving human subjects require ethical considerations (Babbie 1989 and Sommer and Sommer 2002). The researcher took into consideration issues of confidentiality of the interviewees. The obligation of the researcher to protect interviewees' identity was assured to research respondents. While the identities of the publishing houses were known to the researcher, the houses would be protected from public exposure and that the research data would be kept in confidence. When making appointments with managers of publishing houses the following information was provided to the interviewees:

- The objectives of the study;
- Expected benefits of the findings of the study to publishing houses and also to the education system as a whole;
- Duration of the interview; that the interview would take between 30- 45 minutes
- The freedom of the interviewees to choose the time for the interviews to take place; and
- That the information obtained from interviewees would be kept confidential. Code numbers instead of real names of publishing houses would be used.

4.12 Methodological Limitations Encountered in the Study

In carrying out this study the following limitations were also noted:

- There were problems in some cases of distinguishing between male and female characters in the textbooks. This has been attributed to the fact that some names apply to both genders. For example, the name Bahati is a name for males as well as for females. This problem of not distinguishing female from male characters is exacerbated by the fact that Kiswahili (a Bantu Language) like other languages such as Chinese, Finnish, Hungarian and Aztec, has no distinction between a female and a male for the third person pronoun. This is not the case with for example, English and French languages when describing an unspecified referent;
- Making subjective judgments in the interpretation of the findings. While efforts have been made to ensure that data collection instruments are valid and reliable, the personal subjective judgments of the researcher have not completely been eradicated but have been minimized;
- Making a strong connection between the depiction of gender roles in the textbooks to be content analyzed and the prevailing gender roles in the society. The usual trend in most developing countries like Tanzania is the lack of gender disaggregated data so it has at some incidences proved difficult to relate the gender gaps that have been depicted in textbooks and those that exist in society when discussing the findings;
- The inability to get and use appropriate computer software tools. The researcher was not able to get the soft ware computer programmes that would enable him to;
 - Code the gender roles from the textbooks (Chapter 4 Section 4.4.7 bullet 7),
 - Calculate the intercoder percentage agreement (Chapter 4 Section 4.4.16.4);
- To translate appropriately (with confidence) the different concepts in the textbooks from Kiswahili to English was not that much easy. It should be noted that out of the 40 textbooks content analyzed, 35 of them were written in Kiswahili which is the medium of instruction in government primary schools hence in the presentation and discussion of the findings translation had to be done.

4.13 Data Analysis of the findings of Interviews

An important part of the study was to consult with a range of publishers and the BMU in the development and approval of textbooks. The purpose was to determine the level of awareness of organizations and institutions on gender issues raised in the Education and Training Policy. The study also wanted to gauge the extent to which publishing houses and the BMU were already modifying gender stereotyping in textbooks that they were responsible for producing and approving respectively. Tape-recording and note-taking were used in collecting data using the interview technique.

CHAPTER FIVE

PRESENTATION AND DISCUSSION OF THE FINDINGS

5.1 Introduction

In presenting the results on the depiction of frequency of appearances, occupations and activities carried out by male and female characters, tables have been used. Also in tabular form is a comparison of female and male characters in percentages and ratios. Questions have been used to underscore the portrayal of gender roles beyond numbers to facilitate the discussion, which also hinges on the qualitative aspects of the results.

Already developed are guiding questions adapted from FAWE (Kabira and Masinjila 1997) and Davies (1995) that have been used to determine portrayal of gender-stereotyped roles. In investigating the carrying out of activities, the involvement of the characters has been differentiated on the basis of whether or not they have been depicted as active or passive. The presentation and discussion of the findings of the portrayal of gender roles have been done in the following textbooks for Vocational Skills, Science, Social Studies, Mathematics, English, and Kiswahili.

5.2 Findings in Vocational Skills Textbooks

5.2.1 Introduction

In order to understand the presentation of the findings from content analysis of Vocational Skills textbooks, a list of what constitutes occupational fields under this subject has been shown. The subject Vocational Skills comprises the following 19 occupational fields:

- i. Pictorial art, printing and decoration;
- ii. Modelling and construction;
- iii. Basketry;
- iv. Cobbling;
- v. Needle work, embroidery and tailoring;
- vi. Theatre arts;
- vii. Music;
- viii. Cookery;

- ix. Laundry;
- x. Masonry;
- xi. Carpentry;
- xii. Metal work;
- xiii. Physical education and sports;
- xiv. Plumbing;
- xv. Agriculture and animal production;
- xvi. Photography;
- xvii. Watch and clock repair;
- xviii. Electrical; and
- xix. Radio repair.

The objectives of teaching Vocational Skills course as specified in the syllabus are also highlighted. The course is taught in all government primary schools in Mainland Tanzania from standard I – VII (MOEC 1996). The teaching of the subject is aimed at preparing primary school pupils by developing in them knowledge and skills in different vocational skills so that each pupil will, among other achievements, be able to:

- engage in activities which will enable her/him to become self reliant in the work environment;
- contribute towards promoting the national economy; and
- exhibit a habit of utilizing extra time usefully.

The Vocational Skills textbooks that have been content analyzed are:

- i. Taasisi ya Elimu Tanzania. 1999. *Stadi za Kazi: Darasa la Tatu: Kitabu cha Mwanafunzi*. Dar es Salaam: Ben and Company Limited;
- ii. Taasisi ya Elimu Tanzania. 1999. *Stadi za Kazi: Darasa la Nne: Kitabu cha Mwanafunzi*. Dar es Salaam: Ben Company Limited;
- iii. Taasisi ya Elimu Tanzania. 1999. *Stadi za Kazi: Darasa la Tano: Kitabu cha Mwanafunzi*. Dar es Salaam: Ben and Company Limited;
- iv. Taasisi ya Elimu Tanzania. 1999. *Stadi za Kazi: Darasa la Sita: Kitabu cha Mwanafunzi*. Dar es Salaam: Aidan Education (T) limited;
- v. Taasisi ya Elimu Tanzania. 1999. *Stadi za Kazi: Darasa la Saba: Kitabu cha Mwanafunzi*. Dar es Salaam: Aidan Education (T) limited;

In content analyzing of gender roles in Vocational Studies textbooks, the following categories have been used:

- Frequency of appearance of characters;
- Work employment; and
- Leisure games and sports.

5.2.2 Depiction of frequency of illustrated characters

The findings of the illustrated characters are shown in Table 5.1. Shown also in the table are the numbers of illustrations, percentages and ratios of female to male characters in each of the textbooks for grades three to seven.

Table 5.1 Frequency of appearance of male and female illustrated characters in Vocational Skills textbooks

Textbook for grade	Males	Percentage	Females	Percentage	Total characters	Ratio of female to male
3	66	65.3	35	34.7	101	1:1.9
4	44	72.1	17	27.9	61	1:2.6
5	5	55.6	4	44.4	9	1:1.3
6	156	94	10	6	166	1:15.6
7	181	91	18	9	199	1:10.1
Total illustrations	452	84.3	84	15.7	536	1:54

The findings in Table 5.1 show that in each textbook in all grades there are more illustrated male characters than females. The total number of illustrated males is 452 (84.3%) compared to 84 (15.7%) for females. As can be noted, the difference is very conspicuous for textbooks used in grades six and seven.

The findings in Table 5.1 portray gender imbalance among characters. There is gender bias in presenting characters considering that the population of females and males in Tanzania is almost the same. 51% of the population is women (Mukangara and Koda 1997 and Daily News -Tanzania 1 January 2003). The omission or under-representation of female characters in textbook implies that females do not play an important role in society, particularly in the development endeavor. Such depiction of illustrations does not ensure the realization of the set curriculum objectives of the subject in enabling boy and girl pupils to:

- *engage in activities which will enable her/him to become self-reliant in the work environment;*” and
- *contribute towards promoting the national economy*” (MOEC 1996).

5.2.3 Portrayal of occupations

The portrayal of occupations to male and female characters can be exemplified by data in Table 5.2.

Table 5.2 Occupations for males and females illustrated in Vocational Skills textbooks

Type of occupation/ Profession	Number of illustrated males	Number of illustrated females
Printing	1	-
Clay pottery	2	-
Tea picking	-	7
Bee Keeping	1	-
Masonry	12	1
Blacksmith	2	-
Fish keeping	1	-
Photograph processing	2	-
Gardening of flowers and vegetables	1	1
Poultry keeping	4	3
Rabbit keeping	1	-
Total number of occupations	11	4

The findings in Table 5.2 can have a negative impact on attitudes of the young learners since it is implied that most work skills are exclusively for males and that females do not explicitly acquire the knowledge and skills related to some vocations. Males have been exposed to 11 occupations while females have only 4 occupations open to them. Looking closely at the portrayal of the occupations, one notices that the pegging is stereotyped in what society appreciates as being proper to males and females. A closer look at the pegging of occupations shows that those related to the home, like gardening and poultry keeping are mostly pegged to female characters while those outside the home are pegged to males. Tea picking can be linked to a stereotyped thinking that females are considered good at using their hands when carrying out different activities involving hands (Unstructured interview/discussion with Sigalla 2002).

In comparison with males, women and children are considered a form of cheap labour. In Tanzania for example, women and children in the Southern Highlands regions pick tea. Although picking tea is a strenuous work and takes a long time, the remuneration is comparatively small. Fewer males than females are attracted in tea-picking work because of the low remuneration (Unstructured interview with Sigalla, February 2002).

Other gender activists in Tanzania have also discussed the status of people working in tea plantations. Keller et al (1999) has noted the phenomenon in which females have been shown being engaged in such activities as picking tea. Women are engaged as casual labourers in plantations and farms owned by better-off farmers. Researchers have, however, argued that most women working in these plantations have few, if any, benefits. The women are discriminated against in remuneration and have unequal access to permanent employment and higher positions of leadership within the plantations.

5.2.4 Depiction of characters in sports, games and leisure related activities

Music, theatre arts, physical education and sports are skills that relate to sports, games and leisure in the Vocational Skills curriculum. There are no human illustrations in music related skills in all of the five textbooks of the Vocational Skills subject. However, nine male illustrations as compared to one female illustration are presented in the theatre arts chapters of the textbooks. The illustration for theatre arts is in the textbook for grade three. The picture shows a boy simulating cooking. It is in the physical education and sports related skills that most male and female illustrations are found. What can be noted on the illustrations is that the numbers of female characters in textbooks decrease as grades go higher up the education ladder in favour of males. Table 5.3: shows the number of male and female illustrations depicted in games and sports.

Table 5.3: Male and female characters illustrated in games and sports

Type of game/sport	Illustrated characters per textbooks grade											
	Gr. 3		Gr. 4		Gr. 5		Gr. 6		Gr. 7		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
Simple games	5	5	2	2	-	-	6	-	-	-	13	7
Gymnastics	9	-	16	-	-	-	-	-	-	-	25	-
Jumping	-	-	4	-	3	3	-	-	3	-	10	3
Throws	-	-	5	3	5	-	-	-	-	-	10	3
Racing	-	-	2	-	-	-	7	4	9	1	18	5
Basket Ball	-	-	-	-	-	-	41	-	17	-	58	-
Table Tennis	-	-	-	-	-	-	-	-	12	3	12	3
Handball	-	-	-	-	-	-	14	-	4	-	18	-
Total	14	5	29	5	8	3	68	4	45	4	164	21

Findings in Table 5.3 show that in each textbook there are more male illustrations than female ones. There are fewer female illustrations in the physical education sports chapters for grade six and seven. One possible explanation of excluding girls in competitive games such as athletics, handball, basketball, table tennis, and wrestling is the fact that "girl games" are not accompanied with illustrations. Netball, for example, which is considered a game for females, does not depict the skills a netball player is required to master. Such important skills as "passing and receiving the ball", "shooting" and "jumping for the ball" are not illustrated in the textbooks. The game is superficially represented. This would imply that netball is an inferior game when compared to 'boys' games. The negative attitude that is held on this "girls" game of netball might change positively especially in countries of East Africa. This optimism is based on the fact that since 2003, regional East Africa male club champions are held yearly concurrently with those of women. The decision to involve men in this traditional female game is a move which can be considered gender positive as it would elevate the status of netball.

In the textbooks for grades three and four where there are female illustrations, girls are involved in traditional simple non-competitive games. It should be noted that both girls and boys are involved in these recreational traditional games. Even in these games males are shown to be more active than girls. A male instructor is depicted in one of these traditional games. None has a female instructor depicted. This way, girls have no role model for trainers in games and leadership positions in sports and games. Role models and leadership roles are taken for granted to be a monopoly of males. The imbalance of male and female characters in physical education and sports in Vocational Skills subject textbooks puts the girls at a

disadvantage in realising the set objectives of teaching Physical Education and Sports in Vocational Skills subject as depicted in the syllabus (MOEC 1996: xiv). Some of the objectives include:

- To appreciate and participate in competitive and recreational games;
- To use his/her spare time to do extra physical drill in the sports;
- To use his/her talent to participate in competition at different levels so as to promote and make schools, areas, regions and the nation known to other places through games; and
- To overcome mental stress by participating in different roles e.g. as a player, coach or spectator.

While the assumption in the curriculum is that both boys and girls studying Vocational Skills subject would realise the set official curriculum objectives related to physical education and sports, the illustrations on the other hand favour only males. The females would thus feel marginalized and could easily disassociate themselves from physical education and sports activities. The illustrations implicitly show that males have the right to participate in competitive games while females become spectators to cheer the playing males (Michel 1986). The realisation of the set objectives is therefore jeopardized. Hidden messages emerge to learners through participation in those sports and games and give the impression that leisure is for males and not females. Also more portrayals of boys in games and sports lead the boys to acquire personality traits that are advantageous to them and not to girls. By participating in sports and games boys acquire characteristics related to leadership such as leadership skills, competitive spirit and availability of several options for future occupational careers.

Findings from research studies on the participation of girls in games at schools, elsewhere, have indicated that fewer girls than boys are effectively involved in competitive games. Boys also occupy more space in the school grounds (Browne 1990).

5.3 Findings in Science Textbooks

5.3.1 Introduction

In presenting and discussing the findings in Science textbooks, three categories have been looked into. These are the frequency of appearances of female and male characters, the occupations pegged to the characters, and the portrayal of illustrated and named male and female characters as active or passive. The Science textbooks that have been content analyzed are:

- i. Taasisi ya Elimu Tanzania. 1997. *Sayansi (1) Shule za Msingi: Darasa la Kwanza* Dar es Salaam: .DUP (1996) LTD;
- ii. Taasisi ya Elimu Tanzania. 2000. *Sayansi (2): Kitabu cha Mwanafunzi: Darasa la Pili*. Dar es Salaam: Mture Education Publisher Limited;
- iii. Taasisi ya Elimu Tanzania. 1997. *Sayansi (3): Kitabu cha Mwanafunzi: Darasa la Tatu*. Dar es Salaam: Ben and Company Limited;
- iv. Taasisi ya Elimu Tanzania. 1997. *Sayansi (4): Kitabu cha Mwanafunzi: Darasa la Nne*. Dar es Salaam: Ben and Company Limited;
- v. Taasisi ya Elimu Tanzania. 1999. *Sayansi (5): Kitabu cha Mwanafunzi: Darasa la Tano*. Dar es Salaam: Mture Education Publishers Limited;
- vi. Taasisi ya Elimu Tanzania. 1999. *Sayansi (6): Kitabu cha Mwanafunzi: Darasa la Sita*. Dar es Salaam: Mture Education Publisher Limited; and
- vii. Taasisi ya Elimu Tanzania. 1998. *Sayansi (7): Darasa la Saba: Kitabu cha Mwanafunzi*. Dar es Salaam: Readit Books.

In content analysing Science textbooks, the following categories were used:

- Frequency of appearance of characters;
- Work employment; and
- Involvement in carrying out science activities.

5.3.2 Depiction of frequency of appearance of characters

Data in Table 5.4 show the number of male and female illustrations in each of the textbooks for grades one to seven. Also shown in the table are percentages and ratios of illustrated males and females.

Table 5.4 Frequency of appearance of male and female characters illustrated in Science textbooks

Textbook for Grades	Male	Percentage	Females	Percentage	Total characters	Ratio of females to males
1	79	56.8	60	43.2	139	1:1.3
2	81	53.3	71	46.7	152	1:1.1
3	56	63.6	32	36.4	88	1.7
4	37	72.2	14	27.5	51	1:2.6
5	39	63.9	22	36.1	61	1.8
6	53	60	36	40	89	1:1.4
7	60	56.6	46	43.4	106	1:1.4
Total	405	59.0	281	41.0	686	1:1.4

Data in Table 5.4 show an improved balance in the illustration of male and female characters in Science textbooks compared with those of Vocational Skills textbooks. Unlike the presentation of the illustrated characters in the Vocational Skills textbooks where the percentage is 84.3 for males and 15.7 for females, in Science textbooks is 59 for males and 41 for females. The findings in Science textbooks, however, show that in each textbook for a given grade, more males than females are illustrated. The difference of percentage of illustrated males and that of females is almost the same in grade two textbook. There are differences, however, between the numbers of illustrations in grade two textbook of 1997 edition compared with the 2000 edition. In the 1997 edition, for example, a boy was depicted doing a scientific task in the topic “*Scientific techniques and processes of inquiry*”. In the second edition of 2000 a girl has been illustrated in place of a boy to inquire on ‘*Why a torch does not give light.*’ There have therefore been some changes made to the first edition of 1997 by ensuring gender balance between male and female illustrations. It can be speculated that such depiction would help the girls to develop a scientific inquiring mind.

Apart from the noted frequency of appearance of characters as presented by illustrations, the number of named and unnamed characters has also been used to determine the frequency of appearance of characters in Science textbooks. Named human illustrations appear only in Book Two and are the only Science textbook with named characters. The other six primary school textbooks for science subject do not have named characters in the captions. Table 5.5 shows the number of named and unnamed characters in the textbook for grade two.

Table 5.5 Frequency of named and unnamed characters in grade two Science textbook

	males	percentage	females	percentage
Named	11	55	9	45
Unnamed	26	45.6	31	54

The findings in Table 5.5 show that there are more named male characters compared to female characters. The number of unnamed characters for females however, surpasses that of males. Omission of names of many female characters in textbooks compared to male characters could have a negative affects on the formation of positive identities to female learners. A name is an important identity which signifies a person's existence, position in society and power relations between females and males in the family and the community at large. The absence of names or naming only a few female characters signifies the low status associated with the female gender.

5.3.3 The depiction of males and females in work employment

There is an improved gender balance in the frequency of presentation of males and females in the series of Science textbooks. A closer look at the depiction of the characters in occupations does not however match the noted balance in the frequency of appearance as discussed below. Data in table 5.6 show the frequency of appearance of characters in Science textbooks.

Table 5.6 Depicted occupations for male and female characters in Science textbooks

S/N	Type of occupation/profession	Number of males illustrated	Number of females illustrated
1	Leader/official designate	1	-
2	King	1	-
3	Drivers of buses, cars, tractors, ambulance, a vehicle carrying dead bodies	7	-
4	Captain of a boat	1	-
5	Fruit vendor/seller	1	-

6	Meat seller	1	-
7	Farmers using - Insecticides - Plough	2	-
8	Using a donkey for transport	1	-
9	Loader of goods	7	-
10.	Doctors	2	1
11	Nurse	-	5
12	Soldiers	3	-
13	Masons	2	-
14	Miners	2	-
15	Forester	1	-
16	Counsellors	1	1
17	First aides	-	3
18	Teacher	-	1
19	Carpenter	4	-
20	Gardener	-	1
	Total number of occupations	17	6

An examination of Table 5.6 shows that males are illustrated in a wide variety of occupations compared to female characters. While males have been pegged to 17 occupations/employments, females have been portrayed in six careers only. The ratio between female and male pegging of occupations is one to three.

What can be noted also is the stereotyping of pegging of the occupations. The careers that relate to service provision of nursing, first aid, counselling and teaching have in most cases been pegged to females. These are highly stereotypical “feminine” occupations. Leadership positions such as kingship are given to males only. All characters depicted as drivers, farmers, soldiers, carpenters and masons are males. In addition the pegging of occupations to males relates mostly to use of newer technology in a given field. For examples, the depicted male farmers use insecticides and plough unlike the female gardener who uses an ordinary pipe to water flowers and plants in a garden near the home.

5.3.4 Depiction in carrying out of science activities

Table 5.7 shows the involvement of males and females in carrying out scientific activities and also in describing scientific concepts in the textbooks.

Table 5.7 Activities pegged to female and male characters

	Activities in science textbooks for grade							
	1	2	3	4	5	6	7	Total
Males	67	71	54	32	37	36	47	344
Females	53	73	31	12	21	25	41	256
Total	120	144	85	44	58	61	88	600

From Table 5.7 it can be seen that more males than females are depicted carrying out activities in all Science textbooks except that for standard two. This overall depiction where more males are portrayed being involved in science activities can have a negative impact on girl students in pursuing science subjects. Girls lack role models in science related behaviors as a result of such a depiction in the textbooks (Bazler and Simons 1990). Role models are important in providing an example to imitate. Female and male role models should equally be featured in science textbooks carrying out scientific activities. This would enable both girls and boys alike to involve themselves in science subjects for future science related careers.

It has been argued that the way textbooks are written do not provide motivation for girls to learn science (Beverly cited by Koza 1994). Students need to be motivated to learn science and one way to accomplish this is to include characters which readers can identify with in textbooks. It has been demonstrated that when the character is of the same sex as the reader, the reader will be more involved in the activity and remember the activities pursued (Koza 1994).

According to Mosley (n.d) who bases examples from mathematics, children can be prevented from fulfilling their potential in mastering different subjects if they do not see their life style or group with which they can identify with. In this study, since girls do not see many female models conducting science activities, they would feel that the subject is neither about them nor relevant to them. Such a situation would alienate girl learners from the subject and as a result of this situation their enthusiasm for the subject diminishes making them put less effort in the subject.

Another phenomenon that comes to the fore is the pegging of activities that are gender stereotyped. Gender stereotyping which has been noted in the pegging of occupations to male and female characters in Vocational Skills textbooks has also been noted in the carrying out of science related activities. Topics in Science subject syllabus are taught thematically from grade one to seven. The topics include *“First aid and social service provisioning”*. which also include attending to the sick. In most cases it is the females who are depicted performing First Aid to males. Males have been shown as hurt, sick and involved in accidents. In other words male characters receive services from females. Figure 5.1 below illustrates this case. The rest of the illustrations in Science textbooks showing the trend are found in Appendix E. Appendix IV are illustrations from textbooks of other subjects such as Kiswahili where female characters are depicted rendering First Aid.

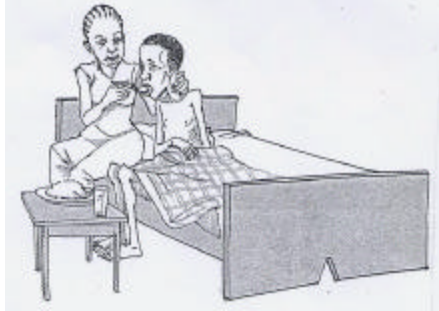
Figure 5.1: A girl performing First Aid to a drowning boy



Source: *Sayansi: Kitabu cha Mwanafunzi: Darasa la Sita 6* (p.48). A girl rescues a boy from drowning, after which she performs First Aid to him. The good work done by the girl is not commended upon. This can be contrasted with a story in Kiswahili textbook for grade 3, p.34-35, where such performance of rescuing a drowning person by a boy Musa is described as heroic.

The topic *“Health and Ways of Preventing Diseases”* has likewise been illustrated and shows the rendering of First Aid to victims in different situations. Generally the depicted trend has in most cases been that of females rendering first aid and that the victims have all been males. Figure 5.2 depicts a female taking care of a sick person suffering from HIV/AIDS.

Figure 5.2: A woman feeding a person with HIV/AIDS



Source: *Sayansi: Kitabu cha Mwanafunzi: Darasa la Sita 6* (p.49). A woman is taking care of an HIV/AIDS patient. With the HIV/AIDS pandemic, an extra burden for females of caring for sick people in the family has increased.

The portrayed sick people are those with symptoms of high and low blood pressure, a person with HIV/AIDS being taken care of by a woman, a baby being immunized by a female nurse while another woman (probably a mother) is holding a baby that is being immunized. In all illustrations, the activities of women are stereotyped as only women are depicted in the caring roles at the family level and other care giving related activities. This is an extension of family roles carried outside the home. Other illustrations depicting females taking care of males are found in Appendix E

The stereotype situation where females solve health problems of males is the actual situation prevailing in the society. Caring for the sick puts pressure on the females' time in carrying out productive, reproductive and community work where there is a rigid gender division of labor. The boys and girls can model on this and thus maintain the status quo of the unequal distribution of division of labor between males and females, especially in attending to the sick.

5.3.5 Stereotyped nurturing activities by females

Apart from the recurring depiction of females only performing First Aid and attending to the sick, another depicted stereotyped reproductive activity relates to nurturing activities of bringing up babies. Female characters are the only illustrated people in association with the bringing up of babies even when other illustrations could have appropriately involved males. Table 5.8 shows the stereotyped illustrations regardless of the topic being covered.

Table 5.8 Depicted stereotyped nurturing activities by females

Textbook for grade	Topic covered	Type of illustration
One (p.9)	Cleanliness and nutritious food	A mother breast feeding a baby
Two (p.32)	Living things	A mother breast feeding a baby
Three (p.35)	Characteristics of living things	A mother breast feeding a baby
Three (P.54)	Reproduction	A woman holding a baby
Three (p.60)	Animal food	A mother breast feeding a baby
Five (p.37)	Prevention of diseases	A woman holding a baby who is being immunized by a female nurse
Six (p.52)	Basic needs for health and life (The importance of breast milk to a baby).	A mother breast feeding a baby
Six (p.49)	First Aid (FA)	A woman giving FA to a female who has diarrhea
Seven (p.10)	Record keeping of a child's growth and development	A woman/mother weighing a baby
Seven (p. 26)	Prevention of diseases	A woman holding a baby who is being immunized

It can be seen from Table 5.8 that the topics covered in most Science textbooks have illustrations that depict mothers in nurturing activities. From what has been illustrated, writers assume that women are solely responsible for child rearing and upbringing. Apart from breast-feeding in showing the '*importance of breast milk for a baby*', other illustrations could be used to show the involvement of males in the upbringing of children. Such depiction where only women are involved in upbringing of children has negative effects on users of such textbooks as the illustrations are stereotyped. Readers would assume that the activities of nurturing and upbringing of children is a domain of mothers and not fathers. This should not be the case as males should also be involved in caring activities within the family.

The involvement of men would not only help to lessen the burden of women in carrying out reproductive as well as productive roles but also provide for the psychological needs of the child such as parental love and security. There are other long-term effects on the mother's career because of the dual role in the family when compared to men who abrogate nurturing activities to females. The noted depiction does not adhere to the taught curriculum and the accompanying teaching and learning strategies. The teacher is required for example, to guide pupils (girls and boys) to discuss the keeping of records of the child's growth and development. The illustration confirms the status quo which most children observe in their

families and the community at large. Schools do not challenge these practices which come as hidden gender role messages in textbooks.

Such depiction is positive since it develops nurturing and expressive traits among female characters. In girls, this enhances cooperation and connectedness which is missing in boys who through socialization acquire individualistic tendencies and also learning separately. Males should also be depicted performing these positive characteristics; otherwise both male and female learners will develop an attitude that such roles are a monopoly of females. As a result this does not ensure the development of equal gender relations. Basow (1993) citing Deaux and Major (1987), Eally (1987b) and Eptein (1988) argues that traits develop as a result of the distinctive situations each sex encounters as they play particular roles. Examples are given that individuals who spend much time caring for others, especially young children, will be encouraged to develop nurturing and expressive traits. Those who spend much time in competitive hierarchical employment situations will be encouraged to develop agentic and assertive traits.

5.3.6 Pegging of negative behaviour to males

Looking at some illustrations, it can also be noted that negative traits in terms of bad behavior are associated with one sex. Such misbehavior includes stealing, cruelty, drug abuse and alcoholism. These have mostly been pegged to male characters as figure 5.3 shows. This pegging of negative behavior is not unique to Science textbooks whose content has been analyzed, but cuts across other textbooks in the other subjects. Some of the illustrations, which depict acts of misbehaviour and cruelty across textbooks that have been content analyzed are found in Appendix G.

Figure 5.3: Acts of misbehavior of stealing and drug abuse



The top illustration- Sources: *Sayansi (2) Kitabu cha Mwanafunzi: Darasa la Pili* (p.61). The teaching of 'sound' topic is illustrated by a male thief who knocks a bottle that makes sound. The centre illustration- Source: *Sayansi 4 Kitabu cha Mwanafunzi: Darasa la Nne (17)* are two boys is depicted taking alcohol while man in the same illustration at the bottom is using an injection to drug himself. Source: *Sayansi 7: Kitabu cha Mwanafunzi: Darasa la Saba (19)*. A man abuses drugs using injectables.

Although this might be seen to be the reality, it is, however, a sexist stereotyping, which is a dangerous generalization. It is not true that females are not involved in such negative behavior. It is now common to find in the media, courts and law reports show both women and men being involved in drug abuse and armed robbery, besides prostitution. Because of the socialization process, traits such as disobedience, aggression and theft have very much been associated with males. Boys might regard this anti-social behavior as acts of heroism. Textbooks need to depict the appropriate positive and negative personality traits for both girls and boys to emulate and judge the worthiness of such behavior.

This pegging of negative actions to male characters has also been noted in the Commonwealth study (Davies, 1995) on gender bias in textbooks in the Caribbean. On this pegging of misbehavior, Davies (1995:7) concludes:

"... Perhaps however, the most dangerous stereotype for males was that of being unkind, threatening, and criminal. It is not that most men were shown with these

qualities but whenever the qualities were shown they were associated with males”.

5.4 Findings in Social Studies Textbooks

5.4.1 Introduction

The idea of introducing Social Studies subject in Tanzania primary schools was done in 1993 after the government's decision in 1992 to streamline the then prevailing education packages (MOEC 1996: iii). Social Studies subject was introduced as an integrated subject comprising topics selected subjects of History, Civics and Geography. Formerly these subjects had been taught as separate entities. The rationale for the adjustment of the curriculum is stated in the introduction of the Social Studies syllabus. Social Studies like other subjects aim at orienting education according to the goals of the country (as stipulated in the Education and Training Policy of Tanzania) by having a manageable number of subjects for pupils in primary schools. This assures ample time for covering the content thus ensuring that the education offered is geared towards preparing each Tanzanian to maximize opportunities of life, self-advancement and self-reliance.

Social Studies aims at, among other things, to prepare each Tanzanian child (boy and girl) to be conscious of oneself and one's place in the family, Tanzanian society and the world. The subject also intends to enable the learners to appreciate the interdependence between human beings and the environment. Pupils' textbooks that have been content analyzed are used from grade three to seven. Four of the five Social Studies textbooks that have been content analyzed are of the first edition of the textbooks. The second edition of grade six textbook has been content analyzed. In order to understand the textbooks that have been content analyzed for this subject the following is a list of the Social Studies textbooks:

- i. Taasisi ya Elimu Tanzania. 1996. *Maarifa ya Jamii kwa Shule za Msingi (3)*. Dar es Salaam: Educational Books Publishers;
- ii. Taasisi ya Elimu Tanzania. 1997. *Maarifa ya Jamii kwa Shule za Msingi (4)*. Dar es Salaam: Educational Books Publishers;
- iii. Taasisi ya Elimu Tanzania. 1998. *Maarifa ya Jamii: Kitabu cha Mwanafunzi (5)*. Dar es Salaam: E and D Limited;

- iv. Taasisi ya Elimu Tanzania. 2001. *Maarifa ya Jamii: Kitabu cha Mwanafunzi (6)* Dar es Salaam: E and D Limited; and
- v. Taasisi ya Elimu Tanzania. 1998. *Maarifa ya Jamii: Kitabu cha Mwanafunzi (7)* Dar es Salaam: E and D Limited.

Basing on the illustrated characters and the content narrated in the texts including named characters, the portrayal of gender roles has been content analysed using the following categories:

- Frequency of appearance of characters;
- Pegging of reproductive and productive activities carried out by characters;
- Pegging of occupations to characters;
- The locus where the activities are carried out;
- The pegging of power relationship / leadership position;

Apart from using the questions in the content analysis guide (See Appendix B), the following specific questions have been used as supplementary questions in content analyzing the Social Studies textbooks. These questions have been adapted from studies including those done by Davies (1995), Michel (1986), Kabira and Masinjila (1997) and Obura (1991). The following are the questions that have been used:

- i. Are women, who have played a part in history, politics or life of the country or community recognized?
- ii. Are significant contributions of women and men equally shown or omitted?
- iii. In the selection of content do the textbooks recount the history, geography or agricultural activities etc in a way that focuses on what women have done or are currently doing?
- iv. Do the authors of the textbooks ignore women, their activities and achievements?
- v. Do the textbooks include or exclude the contributions and roles of women and men in the society?
- vi. Do the authors use men's interests and exploits to determine the content and structure of textbooks (For example history is primarily written in terms of war and political leadership)?
- vii. Do the textbooks present women only as relevant in traditional roles as wives, mothers, sisters and daughters?

- viii. Are the experiences of females valued whether in traditional or non-traditional activities?
- ix. Are the lives of female and male characters treated as of equal value regardless of their gender?

5.4.2 Portrayal of frequency of appearance of characters

In presenting the findings of the frequency of appearance of characters, the number of illustrated, named and unnamed male and female characters, have been counted. Male and female nouns and pronouns have also has been counted. A comparison between illustrated, named and unnamed male and female characters has also been shown in percentages and ratios.

Data in Tables 5.8, 5.9 and 5.10 show the frequency of appearance of characters in illustrated, named and unnamed characters for each grade textbook, the percentages of appearance and the male to female ratios.

Table 5.9 Appearance of illustrated characters in Social Studies textbooks

Textbook for grade	Frequency of appearance			Percentage		Ratio of males to females
	M	F	Total	M	F	
3	104	69	173	60	40	2:1
4	20	17	37	54	46	1:1
5	11	1	12	92	8	11:1
6	14	1	15	93	7	14:1
7	4	2	6	66	33	2:1
Total	153	95	248	61	39	2:1

Table 5.10 Frequency of named characters in the text in Social Studies textbooks

Textbook for grade	Frequency of Appearance			Percentage		Ratio of males to females
	M	F	Total	M	F	
3	31	19	50	62	38	1.6 : 1
4	18	5	23	78	22	3.6 : 1
5	45	1	46	98	2	45 : 1
6	13	1	14	93	7	13 : 1
7	-	-	-	-	-	-
Total	107	26	133	80	20	4.1 : 1

Table 5.11 Frequency of unnamed characters in the text of Social Studies textbooks

Textbook for Grade	Frequency of appearance			Percentage		Ratio of males to females
	M	F	Total	M	F	
3	17	16	33	52	48	1.1 : 1
4	4	4	8	50	50	1 : 1
5	5	3	8	62.5	37.5	1.6:1
6	-	-	-	-	-	-
7	2	2	4	50	50	1 : 1
Total	28	25	53	52	48	1 : 1

The findings in Tables 5.9, 5.10 and 5.11 show that in all cases, males are the majority in the illustrated, named and unnamed characters. While the difference between unnamed male and female characters is minimal (52% and 48% respectively), this is not the case with illustrated and named characters. The total percentage of illustrated male characters is 61 and for female characters is 39. With named characters the percentage is 80 for males and 20 for females. A close look at the findings on Tables 5.8 and 5.9 shows several trends as far as illustrated and named male and female characters are concerned. In each textbook for a given grade there have been more males depicted in illustrations and also more named characters compared to those of female characters. The frequency of appearance of illustrated characters for grade three and four textbooks is not that much marked. The ratio of males to females in grade three textbook is almost two to one while that of grade four textbook is 1 to 1. In terms of named characters the ratio is 2 to 1 for grades three and 4 to 1 for grade four. This is not the case with textbooks for grades four to six. The ratio of males to females for illustrated characters is 11 to 1 for grade five and 14 to 1 for grade six. For named characters the ratio is 45 to 1 for grade five textbook and 13 to 1 for grade six textbook.

There are factors that could account for the discrepancy in the depiction of appearance of characters for grades three and four textbooks and those of grades five, six and seven textbooks where more male characters are depicted. The type of topics covered in textbooks for grades three and four differ from those in upper grades and this can be one of the reasons for the noted differences. Also the approach used by authors in writing topics related to History and Civics in Social Studies textbooks account for the neglect of women especially in textbooks for grades five and six where the proportion of illustrated and named male characters is wider compared to that of female characters.

The frequency of appearance of characters is largely determined by the topics covered. The topics in Social Studies textbooks for grade three textbook cover the immediate environment of girl and boy learners. This starts from the home environment and ends with the division. The topics covered include “*Our Home*” “*Our Family*”, *Our clan*”, “*Our culture*,” *Our school*”, “*Our village/street*”, “*Our ward*” and “*Our division.*” The topics in the textbook for grade 4 deal with themes at district and regional levels. “*Communication and transport*”, “*Social Services*” and “*Entertainment*” are topics that deal with content at district level; and “*Social Services and Entertainment*” and “*People in the Region*” are topics covered in grade four textbook at regional level. Topics that deal with issues at national, regional, continental and world levels are covered in textbooks for grades five, six and seven.

In order to underscore the differences in the frequency of appearances of characters to the type of themes written about, below is an example of a detailed comparison between grade three textbook and that of grade five. A comparison has also been made between the findings in Tables 5.11 and 5.12 where the illustrated and named characters in grades three and five textbooks are shown.

Table 5.12 Frequency of illustrated and named characters in grade three textbook

Number and Chapter title	Illustrated characters		Named characters	
	Males	Females	Males	Females
1. Our Family	11	9	5	6
2. Our Clan	11	9	7	5
3. Our Culture	4	4	13	8
4. Our School	32	21	7	3
5. Our Village	18	8	-	-
6. Our Street	12	9	2	-
7. Our Ward	11	10	1	-
8. Our Division	5	4	-	-

Table 5.13 Frequency of appearance of illustrated and named characters in grade five Social Studies textbook

Number and Chapter Title	Illustrated characters		Named characters	
	Males	Females	Males	Females
1. Map Reading Skills	-	-	-	-
2. Our Country Tanzania	2	-	3	-
3. Physical Features	-	-	-	-
4. Climate Natural vegetation	-	-	-	-
5. Ancient Societies	6	-	7	-
6. Colonialism	-	-	43	-
7. Population	-	-	-	-
8. Social Services	-	-	-	-
9. Law and Legal Rights	1	-	-	-
10. Administration	-	-	-	-
11. Natural resources and Tourism	1	-	-	-
12. Agriculture, Livestock Keeping and Fishing	-	-	-	-
13. Mining and Energy	3	-	-	-
14. Industries and Commerce	6	5	-	-

A close scrutiny of the findings between the illustrated and named male and female characters in grade three textbook, in Tables 5.11 and 5.12 show that a small difference exists in frequency of appearance. One of the factors that can account for this situation is the kind of topics written about. The description of “*Our home*”, “*Our Clan*” “*Our School*” “*Our Culture*” obviously includes males and females. The carrying out of activities as depicted in the illustrations at the said locations within the proximity of the home location involves both males and females. For example, chapter one and part of chapter four contain 45 male illustrations compared to 39 female ones. Part of chapter four where there is the sub topic “*How to walk along the road and cross the road safely*”, shows male illustrated characters being dominant. There are 14 male characters compared to five female ones in this topic. The issue of where the activities take place and the kind of activity performed become crucial in determining who between males and females are stereotyped (Kabira and Masinjila 1997). Males are stereotypically prepared to work in dangerous areas, performing ‘masculine’

activities such as driving, riding a bicycle, becoming drunkard and therefore, becoming careless.

Issues of stereotyping of activities and the loci where the activities are performed have also been depicted in the chapter of *“Our Village”*. The presentation of illustrated characters performing activities at the village is lopsided in favour of males in the ratio of 18 to 8. The activities shown include those related to leadership positions and accompanying responsibilities of selling and buying at a market. When the findings in Tables 5.9a and 5.9b are compared on the basis of the number of illustrated and named characters, the following trend comes up:

- All the nine chapters in grade three textbook have illustrated characters unlike the grade five textbook where only four out of 14 chapters have illustrations. This could be a result of the type of content in the chapters. Most geography-related topics in these Social Studies textbooks lack illustrated and named characters. It is only chapter 14 of the textbook for grade five that has two illustrations of human characters. While in the fertilizer factory only males are depicted, in the tea picking activities both females and males are shown. Mayer (1989) has noted the trend where women are underrepresented in Geography textbooks. Mayer (1989) examined the representation of women in human geography textbooks and found that they were underrepresented. She has argued that Geography subject has traditionally emphasized male activities while women are portrayed as playing minor roles;
- In grade three textbooks, the number of male and female illustrations is almost the same in each chapter. This is not the case with the grade five textbook where only males are illustrated in the four chapters of the textbook except in the chapter on *“industries and commerce”*; and
- With named characters, the grade three textbook has both male and female names in the first four chapters. In two of the chapters, only male characters are named and in the remaining two chapters no female names are found in chapters that have history aspects. The topics are *“Our Country Tanzania”*, *“Ancient Societies”* and *“Colonialism”*.

A close look at the topics where the named characters are found shows that the topics cover political and military history. For example, in the topic of *“Colonialism”*, only male agents of colonialism including missionaries, explorers and businessmen are discussed. In dealing with

this sub-topic, male missionaries, explorers and businessmen are mentioned. Also in the sub-topic on *tactics used by nationalist political parties to fight against colonialism*, only males are presented as being involved in the struggle for independence. In the resistance against German colonial rule where wars are narrated, the majority of the named characters were warlords and chiefs who led wars against the Germans. Even in the topic on Ancient History most named characters are chiefs. In this topic even the mentioned female chief (Mwami) Tereza Ntare does not belong to this era, labelled “*Ancient Times*”. Mwami Tereza Ntare should have been discussed in the anti- colonial struggles leading to Tanganyika independence. The inclusion of Mwami Ntare in this topic amounts to what has been labelled by Mosley (n.d) as tokenism. It is evident that the writers did not seriously research historical roles played by the female chief. Lack of seriousness is not only shown by lack of an in-depth treatment of her social and political roles but also the mismatch between the presented facts and the real time she ruled in her chiefdom. Mwami Tereza Ntare’s historical role during the struggles for the independence of Tanganyika has been given a detailed treatment in Section 5.4.8.

Even in chapters where both males and females are mentioned as is the case with chapter five of grade three textbook on “our clan”, what can be noted is the dominance of the culture of the males. A newly married woman for example, has been portrayed as being forced to abandon her clan’s culture and required to adopt the culture of the husband. It is emphasized in the narrative in this chapter that the married woman should be submissive and humble to the new clan members, namely, members of the husband's clan she has joined in marriage. No socialization instructions are given to the husband with reference to the clan’s culture of the wife. This implies that the newly married wife does not only abandon her family culture but also loses her identity.

5.4.3 Depiction of occupations

The emphasis in depicting male activities in the Social Studies textbooks has a bearing on the pegging of occupations to female and male characters. Further, the selected content in the textbooks affects the pegging of occupations to characters. Such mode of writing distorts what prevails in the society, as one gender can be misinterpreted to be economically inactive. Table 5.13 shows how Social Studies textbooks for grades three to seven depict male and female characters in employment/ occupations.

Table 5.14 Occupations presented in Social Studies textbooks by gender

Type of occupation/employment	Frequency of appearance		Appearance in textbook in:				
	Males	Females	Gr. 3	Gr. 4	Gr. 5	Gr. 6	Gr. 7
A. Political related positions	59	6					
1.Chairperson of a village committee	1	-	x				
2.Secretary of a village committee	-	1	x				
3.Member of a village committee	1	-	x				
4.Ten cell leader	1	-	x				
5.Member of school committee	3	2	x				
6.Chief	22	1	x	x	x	x	
7.Sultan	4	-			x		
8.President of a country	6	-			x	x	
9.Councillor	1	-		x			
10.Governor	2	-			x		
11.Prime Minister	3	-			x		
12.President of a political party	4	-			x		
13.Secretary of a political party	1	-			x		
14.Leader of a freedom movement	3	-				x	
15.General secretary (OAU, UNO and Commonwealth)	3	-				x	
16.Feudal Lord	1				x		
17.Maasai leader (Oleiboni)	1	-			x		
18.Member of Parliament	7	2					x
B. Military related employment	6	0					
19.Military commander	2	-			x		
20.Masai soldier	1	-			x		
21.Police officer	3	-			x		
C. Justice related employment	3	0			x		
22.Magistrate	1	-			x		
23.Prosecutor	1	-			x		
24.Court clerk	1	-			x		
D. Social service related employment	3	6					
25.Teacher	3	3			x		
26.Nurse	-	3			x		
E. Vocational related employment	5	0					
27.Carpenter	1	-			x		
28.Mason	1	-			x		
29.Mechanic	2	-			x		
30.Driver	1	-			x		
F. Agriculture Related employment	5	3					
31.Farmer	3	3			x	x	
32.Fisher	2	-			x		
G. Commercial related employment	12	5					
33.Shopkeeper	-	1			x		

34. Market vendor	6	4			x	x	
35. Businessperson	6	-				x	
H. Others	8	-					
36. Explorers	5	-			x		
37. Missionaries	3	-			x		
38. Scientist/inventor	1	-	x				

Data in Table 5.14 depict males being over represented in occupations and also in leadership positions. While males are represented in 93 occupational roles (82.3%), females are shown only in 20 occupational roles. The depiction of data from Table 5.14 is stereotyped into traditional masculine and feminine roles. While males dominate in political, military, legal, vocational, and commercial related occupations, which are considered masculine, females dominate in the social services related occupations such as nursing and teaching.

In terms of the pegging of characters to leadership positions, more males have been represented in leadership positions in government, political and legal institutions. In most situations only males are depicted as Presidents of countries, Prime Ministers, Chiefs, leaders of freedom movements and military commanders. There is, for example, only one presented female chief compared to 22 male chiefs. Such portrayal shows that leadership does not include spheres of life where women are leaders. As a result of such depiction, girls are denied models related to leadership.

The depiction of the roles of females in different occupations has been skewed in favor of males. Women's work has been undervalued as it is discussed in the following section.

5.4.4 Undervaluing of women's work

The role played by the colonial people in the colonial agricultural economy has been narrated in the Social Studies textbook for grade five (p. 58). During the German colonial rule, both males and females worked for many hours in settlers' plantations. Under British colonialism (p.58) the narration on the agriculture economy shows that there was emphasis on the role of men as workers in plantations. The role that women played in the economy during this period is not mentioned. It should be noted that under the British colonial rule, the economy predominantly emphasized cash crops such as sisal, coffee, cotton, tea and sugar. It is reported that male casual labourers worked in these plantations. It is also recorded in the text that up to 1948, in areas such as Kigoma, Rukwa, and Ruvuma, Africans were not allowed to

plant cash crops. This made it possible for the colonialists to get migrant workers more easily from these reserve areas. As they were required to pay taxes, this necessarily forced males to leave their home areas and migrate to plantations in search of employment in order to get money for paying taxes. This is stated in textbook for grade five (p.64):

“The meagre wages they were receiving would enable them to pay taxes and buy essential commodities” (page 64).

The role of females in production of cash crops in the colonial agricultural economy males is not discussed.

According to Geiger (1997:25) citing Mbilinyi (1996) the colonial administration desired to maintain a vividly cost free system of subsistence agriculture in the territory. As primary food producers, women supported households and families. They fed male workers who would be freed to enter the wage labour economy (such as those working as casual labourers in the plantations and male growers of cash crops). Women continued to shoulder responsibilities for subsistence production (Geiger 1997:25). Where husbands migrated to plantations, wives automatically became heads of the households and had therefore to cater for the household needs single-handedly.

The situation in which important reproductive and productive roles played by women have not been depicted in the Social Studies textbooks continues to date in Tanzania. Keller et al (1999) have noted that most activities performed by women in Tanzania are unremunerated and are therefore not recognized in the national accounts. Reproductive work is accepted as part of the natural order of things; and because women and children do it, it is taken for granted and not valued as important. One reason for the continued existence of this situation is the fact that members of the society are still socialised into a rigid gender division of labour.

This rigid socialization is not unique to the Tanzanian situation, but it is typical of African countries, as research findings from some countries in the study carried out by the Commonwealth Secretariat have indicated (Thairu cited in Davies 1995). In this study on gender bias in textbooks, the findings indicated that there has been the tendency for the man to work away from the family or to be involved in cash crop production. This has often left women with no choice but to become heads of households, responsible not only for their

traditional tasks, but also for providing both food and income for the family. The situation where women play such important roles in the family is not accounted for in the textbooks surveyed in the study. Women in textbooks were portrayed as afraid, inferior, inadequate and passive. Males on the other hand were portrayed as aggressive, inventive and dominating. The textbooks, as has been noted in the study, have presented the life and work of men in spite of the actual prevailing situation in Commonwealth African countries where the study was carried out (Davies1995: 8). The women rarely featured and when they did, they were presented as supporters of the men's world.

5.4.5 The depiction of gender division of labour at family level

An example of the rigid division of labour between female and male characters in the family has been accounted for in Grade three textbook of *Maarifa ya Jamii* (p. 10-13). Table 5.14 show a comparison between activities carried out by male and female members in the family of Mr. Mponda.

Table 5.15 Activities performed by each member of Mponda's family

Portrayed activities carried out by Mr. Mponda	Portrayed activities carried out by Mrs. Mponda
<p>A teacher depicted as hard worker</p> <p>A gardener growing vegetables for family consumption and for sale</p> <p>Assists wife in carrying out household activities</p>	<p>A house wife (depicted as hard worker) looks after the family in such activities as:</p> <ul style="list-style-type: none"> • House cleaning; • Cooking; • Collecting water; • Washing dishes; and • Looking after children.
Depicted activities for Ngida (a boy)	Depicted activities for Sheri (a girl)
<ul style="list-style-type: none"> • Helps his father in gardening; • Weeds grass around the house; and • Cleans the compound. <p>NB It is recorded that Ngida performs these activities before going to school.</p>	<p>Sheri performs household chores by:</p> <ul style="list-style-type: none"> • Washing all clothes of family members; • Fetching water and boiling it; • Washing her young sister; and • Washing dishes in the morning. <p>NB It is not shown if Sheri attends school or not.</p>

It can be deduced from Table 5.15 that the traditional gender stereotyped division of labour between male and female members within the household is being reported. The depicted activities are gender stereotyped and that women are disadvantaged by being overworked. In comparison, the girl child performs more activities than the boy. The girl is expected to assist her mother who has more indoors work than the father has. Keller et al (1999) have observed

that in the Tanzanian society, girls are socialized to be hard workers and that the roles assigned to them tend to be repetitive (fetching water and washing dishes) just the same activities as those performed by their mothers.

In the socialization process, each member of the Mponda's family is socialized into gendered division of labour. There are identified tasks traditionally seen as "women's work" or "men's work." Such socialization might lead into boys and girls to grow up knowing that those reproductive tasks, which are important for the well being of the family, are a female affair. Such thinking is not proper in developing equal gender relations, which are aspired for in the constitution of Tanzania (URT 1977) as well as in the Education and Training Policy (1995). When the mother is compared to the father, the father is seen as the bread earner, while the mother stays at home performing "unimportant" tasks. The socialization of children into rigid division of labour is facilitated by the acculturation process as depicted in grade three textbook on the topic of culture.

5.4.6 The association of characters with technology by gender

In carrying out different activities in the reproductive, productive and community spheres, characters have been shown using technology. The depicted use of technology has some implications on the status of the characters using the illustrated technology. For example, the use of a given technology would involve the use of new skills, which denotes the possession of power. Using a technology simplifies the carrying out of a given activity. Table 5.16 shows how male and female characters are depicted on the use of technology.

Table 5.16 Associating characters with use of technology

Type of technology	Frequency of association		Textbook for grade
	Males	Females	
Use of watering can	1	-	3
Riding a bicycle	1	-	3
Driving a car	1	-	3
Fetching water using trolley	1	-	3
Carrying soil using trolley	-	1	4
Repairing a car	2	-	4
Solar instruments	4	-	5
Fertilizer factory	3		5
Making fire using sticks	1	-	5
Iron smelting factory	3	-	6
Japanese car shed	3	-	7
Riding a motor bike	1	-	7
Total	21	1	

The findings in Table 5.16 show that males have been associated with 11 types of technology compared to females who are associated with only one type of technology-carrying soil using trolley. When a character is associated with a given technology it means he/she is either using a given technology, for example riding a bicycle or motorcycle, driving a car, pushing a trolley and making fire or is near it. It could also mean he/she works in a given environment, visits or purchases the given technology, like the case of male characters shown standing in a car shed, in an iron-smelting factory, in a fertilizer factory and a solar instrument. A character being associated with some technology is taken to be having information on issues related to the trade or has purchasing power information and economic power. The one case in which a woman is shown using a trolley to carry soil that has been dug by men does not necessarily show her benefiting from the technology. This can be argued by comparing her with a male character using a trolley to fetch water as shown on page 69 of the Social Studies textbook for grade three.

In order to appreciate how females are disadvantaged in comparison to males in the use of technology, a comparison on the depiction of males and females in the same illustration clarifies the point. The illustration of fetching water, Figure 5.4 which is a reproductive activity, is found in the Social Studies textbook for grade three (p. 69).

Figure 5.4: Ways of fetching water by males and females



Source: *Maarifa ya Jamii Kwa Shule za Msingi: Darasa la Tatu* (p. 69). What can be noted is the difference in the amount of water carried by the man compared to women. The man carries more water than the two women do using technology (trolley). Such depiction is also found in Science Textbooks (See Appendix H).

The activity of fetching water is also depicted in the Science textbook for grade two p. 28 and in grade one textbook (p.17). (See Appendix H, where characters have been depicted in water-fetching activities).

In portraying the activity of fetching water in grade three textbook, there is a discussion on an incidence of shortage of water in an urban residential area (a street). The objective of teaching this topic “*Our Street*” is to enable a pupil to “*list down activities performed by the villagers or residents of a street*”. The ability to list these activities leads to another objective of “*describing advantages of performing such activities*”. Related to this description is an illustration showing both females and males carrying water as depicted by the illustration 6.5 (p. 69) of *Maarifa ya Jamii Book Three* (See figure 5.4). The illustration in figure 5.2 depicts two women and a boy carrying buckets of water on their heads. Also shown behind them is a man carrying water on a trolley. The man is seen carrying more containers of water than the two women and the boy together are able to carry on their heads.

Fetching water is not only illustrated in the Social Studies textbook but also in Science Textbook for grade one (p. 27 and p.28). On page 27, three women and a boy are shown drawing water from a river, a pond and a well respectively. A boy is also shown fetching water from an upright water tape. The stereotyping of females and young males in this activity is therefore replicated. Men are not depicted in the same way as females and boys. On page 29 a muscular man is shown fetching water using the technology of a trolley. Compared to the woman besides him, the difference noted in the Social Studies textbook is repeated as shown in figure 5.4.

Fetching water for daily household use is not an activity usually performed by males. Keller et al (1999) report that in some areas men and boys will fetch water or firewood if the distances are excessive and particularly if they can use a wheelbarrow or other means of transport. In the depicted illustration where the man fetches water using a trolley, the common practice in urban areas is that the water is collected for selling in homes. The illustration depicts a stereotyped situation related to fetching water.

Several gender activists including Keller et al (1999) and Mukangara and Koda (1997) have discussed the issue of availability of water in Tanzania and gender relationship. It is reported that men and women have different relationship with water. While both need water for their

personal health, women also need water to complete daily household tasks. Due to the existing rigid gender division of labor, women are by and large, the primary collectors and users of water in the home (Mukangara and Koda 1997:51). Fetching water for daily household tasks is not a concern or an activity carried out by many males.

Gender activists in Tanzania have discussed how the shortage of water affects the carrying out of productive and reproductive roles. It is reported that when a safe and reliable water source is not within reach from homes, women are affected more than any other social group (Mukangara and Koda, 1997). According to Mukangara and Koda (1997:51) women in Tanzania spend an average of three hours a day collecting water. In some parts of mainland Tanzania, 5% of women walk an average of five kilometers daily to fetch water, which is usually inadequate and unsafe for human consumption. A distant source of water not only means less water but also less time for women to perform other reproductive and productive roles.

5.4.7 Approaches in writing Social Studies textbooks

There are several factors that have contributed to the imbalance in the portrayal of male and female characters as regards the depiction of the frequency, occupations and leadership positions in social studies textbooks. Different researchers (Cairns and Inglis 1989, Charlotte 1976, Geiger 1997, and Obura 1991) have indicated that no emphasis has been placed in the approach taken by authors of Social Studies textbooks to write the history of both men and women. Authors almost unconsciously appear to be devotees of a traditional approach in writing social studies/ history textbooks. The emphasis has been on political and military history as opposed to the every day life of the past (Cairns and Inglis 1987). Standard histories belong to the public domain where women are not immediately visible participants in wars, politics, trade and matters of state.

Cairns and Inglis (1989) carried out an extensive content analysis of history textbooks for primary schools. The findings indicate that, in general, a significant aspect of the past especially economic, cultural and religious history had been neglected in favor of political and military history. Lack of history dimensions that cover community leadership, health care, household economics, transportation, social production and volunteer organizations in

the writing of Social Studies textbooks leads to the neglecting of women characters in these textbooks (Charlotte 1976).

When history is made up of lives of great men rather than histories made up of lives of ordinary people, there is a likelihood of women being neglected. If consideration of the ordinary experience of women, not just great women, is neglected then the history itself is impoverished, because it reflects the historical experience of only half of humanity. Such history becomes partial and inadequate (Geiger 1997). It is however, the reproductive and productive roles of 'ordinary' people that bring up and produce these great men and women in the political and military spheres. Since great men and movements did not operate in a vacuum, there is thus a risk of sacrificing an understanding of society as a whole, and particularly the understanding of relationships between men and women.

Looking at the important roles women have played in the nationalist independence struggle in Tanganyika, Geiger (1997) gives an account of how the approach in writing history accounts for the neglect of women in history. According to her, the marginalization of women in history writing is a result of a familiar pattern where there is the accumulation of endocentric bias in written record. Both primary historiographies produced by colonial officials, missionaries and travelers, and secondary historiography produced by westerners, as well as African scholars are gender biased. Women's political actions and history are "disappeared" in a cumulative process where successive written accounts reinforce and echo the silence of previous ones (P.9-10).

In order to get a clear insight of the role played by women in history, concerted efforts have to be made to unearth these efforts through different techniques. Such techniques as *life history narratives* used by such researchers as Geiger (1997) underscore the role women have played in the making of Tanganyika nationalism from 1955–1965. Life History as a method of collecting historical data is defined as an intensive record of a person's life told to and recorded by another, who then edits and writes the life as though it were an autograph (Ngaiza and Koda 1991:1). In the writing of history using life histories, the emphasis is on the experiences and requirements of ordinary women rather than those in power or of men. It is through such efforts that discoveries of forgotten women can be done.

Obura (1991) cites Grabber and Spender who discovered a surprising range of forgotten women. Grabber et al (1995) discovered a surprising range of forgotten women mathematicians, scientists and artists. Spender (1980) unearthed a good number of philosophers, thinkers and writers during the 18th and 19th centuries in the Anglophone world using life history narratives. In Kenya, Obura (1991) cites Njau and Muleka who discovered forgotten women heroines in Kenya. In Tanzania Ngaiza and Koda (1991) have edited work on unsung heroines where important productive and reproductive roles played by women in the community have been documented using life history narratives.

Besides the problem of failure to search seriously on important historical roles played by women there has also been the problem of unconsciously undervaluing the contribution of women. The examples below can illustrate the case in point in Social Studies/History themes in Tanzania primary textbooks. The first example is on the topic on *Tactics used by political parties to fight for independence* (TIE 1996:49). The content on the struggle for Tanganyika independence through political parties has marginalized women. Women's part in the struggles have gone unnoticed and therefore, undocumented. This has been revealed after intensive oral interviews were carried out using life history narratives with women who were involved in the struggle. Geiger (1997) has noted the important role played by women in the struggles for Tanganyikan independence. The period of active mass nationalist mobilization of against colonial rule (1955 – 1961) very much involved women. The period had been noted for the presence of women who were vocal, often vivacious Tanganyika African National Union (TANU) enthusiasts (Geiger 1997).

The most remembered woman is Bibi Titi. Bibi Titi Mohamed and Julius Nyerere were probably the only TANU leaders whose names were known throughout the country at independence in December 1961 (Illife cited in Geiger 1997). Geiger (1997) recorded that many more women than men were the first to join TANU at its headquarters in Dar-es-Salaam. According to Mashavu and Mzee (interviewed by Geiger 1997) men listened to Nyerere's speeches but were afraid to join TANU for fear of being fired from their jobs. The colonial government did not allow male employees to join TANU and if they joined they lost their jobs. The employers told men that whoever joined TANU would be sacked immediately. Males therefore, joined TANU secretly. They became members by sending their wives to get cards for them. Women centrality to mobilization of people to join TANU is, however, not accounted for in the Social Studies textbooks. Such names as Titi Mohamed

do not appear in Social Studies textbooks as being important historical figures in the struggle for the independence of Tanganyika. Women have been undervalued in the struggle for independence and so have other women who played important roles in constructing, performing, and maintaining nationalism.

Such prominent women as Tereza Ntare who has been mentioned just in passing in the grade five Social Studies textbook demonstrates the second example of undervaluing women's role in the independence struggle. She is mentioned in an evaluation exercise, which is in grade five textbook where students are required to match names of chiefs with the places they ruled or areas of their jurisdiction. No detailed account of her political activities is given in Social Studies textbooks. This is contrary to male chiefs whose political activities in for example fighting against German colonialists have been accounted for in detail. The male chiefs whose activities have been narrated in Social Studies textbook for grade five include, among others, Mangi Meli, Mangi Sina, Mtemi Isike, Mtwana Mkwawa and Mchemba (p. 55-56). It should be noted that while there detailed accounts of chiefs who ruled at the advent of German colonial rule, the likes of Tereza Ntare is not included. Tereza Ntare is simply mentioned in passing over an exercise.

Geiger (1997) vividly gives the political and economic activities by Mwami (Chief) Tereza Ntare. Ntare was one of the most powerful chiefs in the territory. She was also a progressive farmer who was involved in the co-operative movement. She encouraged women in Buha to grow coffee. It should be noted that cash crops like coffee had been a monopoly of men. Her husband led the Kasulu Co-operative Union in 1950's. As an active TANU supporter and also being Mwami (chief), she ordered the royal drum to be sounded in order to summon 60,000 people to hear the speech of Nyerere during the struggle for independence. Omitting such history in Social Studies textbooks shows how women have been undervalued in the history of the struggle for the independence in Tanzania.

Lack of material focused specifically on women contributes to girls to lack of self-esteem, from which boys are less likely to suffer. Thus, the absence of women's history as has been noted in schools can help to explain one of the reasons why many girls feel that they are inferior to boys. It is important to portray a positive image of women in textbooks so as to cultivate gender equality between boys and girls. Such positive portrayal of women provides images with which girls can identify.

5.5 Findings in Mathematics Textbooks

5.5.1 Introduction

In this part of the presentation and discussion of the findings, the textbooks that have been content analyzed have been listed. The categories that have been used in looking at the depiction of gender roles through content analysis have also been shown. The presentation and discussion of the findings using the selected categories have followed this categorization. Finally a summary is given to conclude on the findings.

The following is a list of mathematics textbooks that were used in the content analysis exercise. Indicated for each textbook is the title of the textbook, the grade/class where the textbook is used, the publisher of the books, city and year of publication. All these textbooks were written by a panel of writers under the co-ordination of the Tanzania Institute of Education (TIE). TIE is the National Curriculum Development institution under the Ministry of Education and Culture which is responsible for curriculum development for pre-primary, primary, secondary and teacher education levels. The following is a list of the mathematics textbooks that have been content analysed:

- i. Taasisi ya Elimu Tanzania.1997. *Hisabati: Kitabu cha Mwanafunzi* (1) Dar es Salaam: Ben and Company Limited;
- ii. Taasisi ya Elimu Tanzania. 1997 *Hisabati: Kitabu cha Mwanafunzi* (2) Dar es Salaam: Ben and Company Limited;
- iii. Taasisi ya Elimu Tanzania. 1997 *Hisabati: Kitabu cha Mwanafunzi* (3) Dar es Salaam Ben and Company Limited;
- iv. Taasisi ya Elimu Tanzania. 1997. *Hisabati: Kitabu cha Mwanafunzi* (4) Dar es Salaam; Ben and Company Limited;
- v. Taasisi ya Elimu Tanzania. 1997. *Hisabati: Shule za Msingi* (5) Dar es Salaam: Oxford University Press Tanzania Limited;
- vi. Taasisi ya Elimu Tanzania. 1997. *Hisabati: Kitabu cha Mwanafunzi* (6) Dar es Salaam: Ben and Company Limited; and
- vii. Taasisi ya Elimu Tanzania. 1999. *Hisabati: Kitabu cha Mwanafunzi* (7) Dar es Salaam: Ben and Company Limited.

It can be noted from the above list, with the exception of grade 5 mathematics textbook which has been published by the Oxford University Press Tanzania Limited in 1997, the

remaining 6 textbooks for grades one, two, three, four, six and seven have been published by Ben and Company Limited. Textbooks for grades one to five were published in 1997 while those for grades 6 and 7 were published in 1999. The members in the writing panels of the seven textbooks are the same except for a few variations.

In the content analysing the portrayal of gender roles of male and female characters in mathematics textbooks, the following categories were used:

- Frequency of appearances / references;
- Pegging of work / employment;
- Depiction of economic power in terms of property ownership and sharing of resources, purchasing power and selling capacity;
- Benevolence of characters in sharing resources;
- Portrayal in relation to the use of technology; and
- Pegging of sports and leisure activities to characters.

Not all categories earmarked for the content analysis of textbooks for the study have been used in the analysis as depicted in the above categories for mathematics textbooks. The categories that have not been used include bias in use of language and the portrayal of personality traits. On the use of language, for instance, Kiswahili, the language used in the textbooks is free from gender bias, as it is gender-neutral in expressing the third person singular. Most mathematics problems in examples and exercises found in textbooks refer to mathematical situations and give instructions with no reference to gender in the use of language.

Before presenting and discussing the findings on the depiction of gender roles in mathematics textbooks, specific additional questions apart from those in the content analysis guide (Appendix B) were adapted and designed to content analyse gender roles in mathematics textbooks. The questions were adapted from researchers including Davies (1995), Michel (1986), Kabira and Masinjila in FAWE (1998) and Mosley (n.d). The following are the questions:

- i. Who are depicted as buyers and sellers?
- ii. What is each character depicted to purchase or sell?

- iii. Are there general patterns on the items purchased or sold?
- iv. Who between females and males possess more and therefore, buy or sell more?
- v. Who are depicted as borrowers?
- vi. Who are depicted as borrowing more or borrowing nothing?
- vii. What are the depicted borrowing patterns?
- viii. Who are depicted as participants in investments and serving activities?
- ix. What is the pattern of investments and serving?
- x. Who are depicted as more generous in terms of giving and sharing?
- xi. Who are given more responsibilities with large sums of money?

In the presentation of findings, both quantitative and qualitative analyses have been used. The illustrations and content in the textual materials in the different categories have also been analysed. It should be noted that in the grade one mathematics textbook, the set problems presented are largely numerical and there was therefore, little scope for gender bias. Lack of illustrated characters in the grade one textbook also has led to dropping it in the content analysis exercise hence only six mathematics textbooks were content analysed in this study.

5.5.2 Portrayal of frequency of appearance of characters

The number of illustrations and named characters were counted in each textbook. The findings showed that there were few illustrated characters in comparison to the named characters. The named characters appeared in set problems in teacher's examples and students' exercises in each textbook. Illustrated characters were found in grades two and seven textbooks. The characters found in grade two textbook were human characters that are shown on the Tanzania currency. There were six males and six females that are depicted in the currencies. The former President of Tanzania, Ali Hassan Mwinyi, appears twice in the Tshs. 200-currency note and the Tshs. 1000-currency note. On the other side of the Tshs. 200 note, two illustrated male fishermen are depicted. On one side of the Tshs. 500, one man is shown high up in a clove tree harvesting cloves. Also depicted in the same illustrations are five women also harvesting and processing cloves on the ground. In each currency note a Coat of Arms' symbol is shown with a male and a female. In the grade seven textbook, a girl was shown calculating a certain distance in the field using the *Pythagoras theorem*. The implications of depiction such illustrated characters in other categories are discussed later when dealing with the portrayal of employment patterns of characters.

The frequency of references of named characters in mathematics problems for the six content analysed textbooks is shown in Table 5.17. The percentages and the ratios of females to male characters in each textbook are also shown in the table.

Table 5.17 Frequency of appearance of characters for each textbook per grade

Textbook for grade	Frequency of appearance		Percentage of appearance	Female to male ratio
2	M	16	59.3	1:1.5
	F	11	40.7	
3	M	50	71.4	1:2.5
	F	20	28.6	
4	M	58	60.4	1:1.5
	F	38	39.6	
5	M	79	66.9	1:2
	F	39	33.1	
6	M	40	47.6	1.1:1
	F	44	52.4	
7	M	67	47.5	1.1:1
	F	74	52.5	
Total	M	310	57.8	1:1.4
	F	226	42.8	

From Table 5.17 it can be seen that female characters appear much less frequently than to male characters in textbooks for grades two, three, four and five. This is not the case with textbooks for grades six and seven where more female characters are depicted compared to males ones. The difference in the portrayal of the frequency of males to females in the two sets of textbooks may be a result of different dates of publication of the two sets of textbooks. Textbooks for grades six and seven were published in 1999 while those of grades two, three,

four and five were published in 1997. According to the Manager of the Book Management Unit of the Ministry of Education and Culture, publishing houses that had won the tender of publishing primary school textbooks (including these of mathematics) after 1998 were provided training in the production of school textbooks with a gender perspective. This was facilitated under the Pilot Project for Publishing (PPP), which was initiated in 1994 by the Ministry of Education and Culture. The objective of the PPP project was to ensure that local commercial publishers would by 2002 be able to take full responsibility in the development of manuscript and publishing of textbooks. One of the issues in the PPP training was to expose editors, illustrators and book designers to gender related issues in the production of school textbooks.

Since the frequency of appearance of male characters was greater than that of females in the first set of textbooks for grades two, three, four, and five, it would be expected that more males would be depicted in a wide range of work and employment activities. The same could be said of the second set of mathematics textbooks for grades six and seven where the number of frequency of appearance of female characters was greater than that of males; more occupations would be depicted to females in the two textbooks. This has, however, not been the case in the second set of textbooks in the pegging of characters to work/employment. The pegging of the work employment to male and female characters is what is discussed in the following section.

5.5.3 The pegging of occupations to characters

The depicted list of occupations assigned to men and women in the six textbooks for grades two to seven has been compiled and presented in Table 5.18. The names of characters used in the mathematical set problems and the illustrated characters have formed the basis for formulating the depicted occupations/work employment.

Table 5.18 Depicted occupations in illustrations and text

Type of employment	M	F
Salary earners	7	3
Fishers (fishermen)	3	-
President	2	-
Farming related activities	13	12
Business man (paying tax)	1	-
Carpenter	4	-
Teacher	2	1
Brick maker	1	-
Poultry related work	8	7
Masonry	1	-
Livestock keeping	10	-
Driver	1	-
Typist	-	2
Total	12 occupations mentioned (52 men noted)	5 occupations mentioned (25 women noted)

Data in Table 5.18 shows that more men than women were pegged to occupations. While men are pegged to nine types of occupations women are pegged to only five. Five out of the 12 types of occupations depicted in the textbooks were pegged to males only and there were no women represented in these occupations. For women characters, of the 11 depicted occupations, only one occupation of typing was a domain “monopolised” by women.

Data in Table 5.18 can be interpreted in various ways. The socialization of children who use these textbooks exposes boys to more role models of occupations compared to role models girls are exposed to. The boys are not only exposed to being fishermen, prominent

businessmen who pay taxes, carpenters and forest rangers but also to leadership positions such as being President of a country. Both boys and girls are associated with or have role models in teaching and farming related employment. Such pegging confines the readers to a narrow view of male and female related traditional occupations at their exposure. Although such portrayal affects both boys and girls negatively, the most affected individuals are girls whose employment is narrow.

The pegging of males only or females only to occupations in the traditional way as shown in the findings is gender stereotyped. The pegging of occupations is stereotyped in the sense that it is presented according to the preconceived ideas about what people do and should do as females or males (Koza 1994). Typing as an occupation particularly using manual typewriter is traditionally associated with females at work establishments. Typing is in most cases considered low status job in terms of being lowly paid and also being in the low echelons in the employment hierarchy in an establishment. There are changes however, in social attitudes towards the occupation of typing. Word processing using a computer can now also be associated with males without subjecting it to low status. This change has to be viewed from the context that males can involve themselves in occupations that were traditionally considered to be for females, if the task involves modern technology (Keller et al 1999).

Another interpretation relates to the pegging of salaried employment to characters. Data indicate that seven men were depicted as earning a monthly salary, in comparison to only three women portrayed in the same category. This portrayal of 30% of the salaried employees is higher than the prevailing situation where 20% of women are in paid employment in Tanzania (Mukangara and Koda 1997). Of the employed women who earn wages, there was no indication where a mother is presented as a salaried employee. There was no indication of named females who are also mothers earning salaries. This can be contrasted with depicted males in textbooks for grades four and seven who were said to be fathers. Out of the seven male salaried employees portrayed two were fathers. Such depiction is stereotyped and does not convey the real situation in Tanzania where there are mothers who are also employees earning monthly salaries.

Other researchers such as Foley and Boulware (1990) have also noted this depiction elsewhere, where mothers are not depicted as salaried employees. The findings cited by Foley and Boulware (1990) showed that while male characters were depicted as having working jobs and parenting simultaneously, adult female characters were depicted as job holders or mothers but rarely both. This manner of portrayal of characters could be sending hidden messages to readers that mothers are incapable of salaried employment and that the rightful places for them is to carry out both reproductive and productive tasks at and around the home. Tasks performed by females at and around the hoe are normally not remunerated.

Apart from the false and unrealistic pegging of salaried employees to characters of both genders, the pegging was also lopsided in favour of other work carried out by men. The pegging of more men in occupations did not depict the prevailing situation in Tanzania as far as the participation of women and men in the economy is concerned. According to the Labour Force Survey (LFS) of 1991/92 in Tanzania, Mukangara and Koda (1997) noted that nationally, women constitute 50.2% of the economically active population. In this survey it was also indicated that the majority of women were engaged in agriculture and agricultural related activities, in which they outnumbered men. Table 5.19 depicts this situation of labour participation in Tanzania of males and females in agriculture as cited in Keller et al (1999:39).

Table 5.19 Depiction of labour participation in agriculture by percentage

Crop production	Women's participation	Men's participation
General	56	44
Food crops	75	25
Specific tasks		
Land tilling	56	44
Sowing	74	26
Weeding	70	30

Harvesting	71	27
Marketing	73	27

Source Keller et al 1999. *Towards gender equality in Tanzania*, p.39

The reality shown in Table 5.19 has not been depicted in Mathematics textbooks. Set problems could also involve activities carried out by women. The findings for example, indicated that even in farming and poultry-related activities which normally in real life situations more females than males are involved in carrying out such activities there were more men than women portrayed as being involved in these activities. There was gender bias among writers in selecting occupations in the setting of mathematical problems in the textbooks in favour of male characters contrary to the reality as shown in figure 5.19.

From the data on pegging of work related activities, women were depicted in a narrower range of occupations compared to men. Both males and females are pegged to occupations that are traditional and stereotypical. For women, typing, farming related activities and teaching were gender-stereotyped jobs. For men, the presentation was also stereotyped whereby men are pegged as fishermen. Mukangara and Koda (1997) have noted that not only were there few women in paid employment, but these were also found in female job stereotypes such as nursing, secretarial work and teaching. Women also work in semi-skilled, manual and repetitive jobs. Occupations such as fishing, carpentry, livestock keeping, involvement in big business and being depicted in higher leadership positions are traditionally associated with males.

The pegging of characters to occupations has a bearing on the status of the depicted character in the economic power. Individual purchasing power, selling capacity and ownership of property can reveal this economic power. The following section of the discussion of the findings reveals how the buying and selling activities have been respectively pegged to female and male characters. This is followed by a discussion on how property ownership has been presented.

5.5.4 Pegging of purchasing and selling capacities of characters

Buying and selling are two prominent activities pegged to characters in the set problems in the mathematics textbooks. The pegging of these activities is found in books for grades three to seven. Buying and selling activities indicate the economic status of the character in terms of purchasing power and selling capacity.

In order to compare the purchasing power of males with that of and females, the depicted frequency of buying is shown in each textbook from grade three to seven. The comparison of purchasing power has been discussed in relation to frequency in purchasing examples of male and female characters whose purchases involve more money have been given. Furthermore, Table 5.20 shows the frequency of purchases made by male and female characters and the grade textbook where the purchase has been indicated.

Table 5.20 Frequency of buying activities of the characters

Number of purchases	Frequency of buying		Depicted in textbooks for grade textbook
	M	F	
17	12	5	3
18	10	8	4
31	22	9	5
20	10	10	6
15	8	7	7
Total	101	62	39
Percentage	100	61.4	38.6

It can be seen from Table 5.20 that with the exception of textbooks for grades six and seven where numbers of purchases by males and females were equal, the same was not the case with the textbooks for grades three, four and five. In the later textbooks there were more

males involved in the purchasing endeavours to the extent that the percentage of male and female buyers is tilted in favour of males by about 23%.

This phenomenon was not atypical of mathematics textbooks used in Tanzania but in other countries as well. Such findings have also been noted by other researchers who include among others, Obura (1991)) in Kenya and Davies (1995) in the Caribbean countries of the Commonwealth of Nations. Purchases do not take into account who between males and females in the household had worked more to earn the money. In Tanzania, for example, Mukangara and Koda (1997:17) have noted that for all types of economic production, whether men have made a sizeable labour contribution or not, men largely control the products and proceeds from sales. This ensures the purchasing power they possess compared to females.

In depicting buying activity, it was also important to note the kind of items purchased and the value of the goods. This had the objective of identifying patterns of items bought and their value. The following questions leading to an in-depth understanding of a qualitative data determination were posed on this issue:

- Who between female and male characters have more money in these transactions?
- What type of items are bought and for what purpose?
- Is there a general pattern of items bought and the accompanying value between female and male purchasers? and
- Is there any gender stereotyping in the buying exercise?

In order to respond to the above questions, examples have been shown from mathematics textbooks for grades three to seven in which buying is depicted. In the examples, the highest purchase, the kind of item(s) bought and its value by a male or female are indicated (See Table 5.21 below).

Table 5.21 Examples of items and their values purchased by characters in each Mathematics grade textbook

Textbook Grade	for Purchaser	Type of item bought	Value in Tshs.	Value ratio (female to male)
3	Male	Trousers	8,500	1:5.7
	Female	2 cooking pots	1,500	
4	Male	2 cattle / cows	100,000	1:14.1
	Female	3 pieces of bread and 2 kg of meat	7,000	
5	Male	Refrigerator, cupboard and radio	640,800	1:54.8
	Female	4 kg of beans, 6 kg of rice and 3 kg of meat	11,700	
6	Male	Motor vehicle	2,372,000	1:13.5
	Female	730 litres of milk	175,200	
7	Male	Trousers, erasers, khaki cloth and pair of socks	28,850	1:1.4
	Female	Ex. books, table clocks, broom, blades, glue	40,000	
Total	Male	¾	3,150,150	1:13.4
	Female	¼	235,400	

Data in Table 5.21 represent findings and interpretations from the comparison on the purchased items by male and female characters. Data from the examples indicate that males have purchased items of higher value compared to those purchased by females. The value in terms of ratios of females to males is very glaring in textbooks for grades four, five and six. With the exception of grade seven textbook where the value of goods bought by a female is higher than the goods bought by a male, the value ratio of female to male purchases is at 14 males compared to 10 females for grade seven textbook.

As regards the types of items bought as depicted from examples on Table 5.21, there was a marked difference on the types of items that were purchased by female and male characters.

While females were depicted buying goods for domestic use and consumption (cooking pots, loaves of bread, meat, beans and rice) males were depicted buying cattle, refrigerators, radios, cupboards and motor cars. It can be noted that purchases by males were of higher value and some goods were associated with new technology (cars and radios). These items depicted high status of the purchaser in the community. The goods purchased such as cars and radios denote the possession of economic and information power. Another comparison made was the durability of the purchased goods. Goods purchased by males were of the type that would last longer than those bought by females.

The depiction that females bought goods for domestic use and consumption at the household level shows what generally prevails in Tanzania. This is not a desirable situation, as fathers seem to be divorced from issues that relate to family livelihood. According to Keller et al (1999) it has been reported that many men abrogate their responsibility to contribute to family resources. Females in most cases are thus held responsible for the household in such issues as food security. Their responsibility to purchase food, therefore, becomes crucial. It has also been noted from case studies in Tanzania communities that women cannot demand to know how a man uses his income (Mukangara and Koda 1997:29).

Davies (1995) has also noted that items bought by females are of less value compared to those bought by males as depicted in surveyed textbooks in the Caribbean. Women were shown buying pins and hats while men were engaged in large scale commercial activities including purchasing land, estates, houses, payment of taxes and ownership of a factory. The author however, argued that this portrayal did not depict reality on issues related to business transactions as women in the Caribbean also engage themselves in big purchases of commodities. In Tanzania the few cases where women also involve themselves in businesses and purchase highly valued commodities should be depicted in set mathematics problems for girl learners to have role models to emulate in the business enterprise.

Another prominent activity that featured in mathematics textbooks was selling. Selling which is related to buying was pegged to female and male characters. Selling like buying

denotes economic power possessed by a person. This is especially true for the type and value of what a person sells. In order to discuss the findings on the pegging of characters in relation to selling different commodities, Table 5.22 has been made to show the frequency of selling pegged to females and males. The grade textbook in which the pegging can be found is also shown in Table 5.22.

Table 5.22 Frequency of characters involved in selling activity

Frequency of selling	Textbook for:						Percentage
	Gr.3	Gr.4	Gr.5	Gr.6	Gr.7	Total	
M	7	3	7	1	4	22	78.6
F	1	1	1	1	2	6	21.4

Data in table 5.22 show that more men than women were depicted in selling activities in grades three, four, five and seven textbooks. In the grade six textbook one female and one male were depicted in the selling activity. On the whole, the percentage of males shown in selling activities in the five textbooks was on the higher side, 78.6% males compared to 21.4% for females. There are various reasons that might account for this situation. As men are engaged in paid work, they can have the money to buy goods. This is not the case with females, who because of the rigid division of labour are more engaged in domestic work and other productive activities, which are rarely remunerated but also given little importance.

Another reason which could be attributed to this situation is the likelihood of men acquiring property through different means such as purchase, inheritance and dowry. With female characters such means of acquiring wealth are not common because of traditional cultural practices. In addition authors unconsciously write textbooks without considering the required gender balance and sensitivity. This has been discussed at length in the presentation and discussion of the findings in the Social Studies textbooks in this study.

In order to understand the type of commodities sold by the characters and the value of the sales, data in Table 5.23 show examples taken from grades three to seven mathematics textbooks depicting the type of commodities sold and their values. An example of what commodity has been sold by male and female characters is picked from each textbook.

Table 5.23 Examples of items sold by female and male characters

Textbook grade	Sold by	Type of commodity sold	Value in Tshs.	Value Ratio: females to males
3	M	2 cows / cattle	9,999	1:11.2
	F	Eggs and mangoes	890	
4	M	"Kongoro" soup	7,200	1.3:1
	F	Pastry and buns	9,000	
5	M	Goats	7,200	
	F	Eggs	*—	
6	M	67, 546 oranges	*—	
	F	60000 kg of potatoes, 21,000 kg of groundnuts and 498710 kg of maize	*—	
	M	A cupboard	84,000	1:66.7
	F	A book (sold at a loss of 540/=)	1,260	

Key = *- Value of commodity not specified in Tshs.

The values of the goods sold by females in examples picked from grades five and six textbooks are not indicated. Also not indicated is the value of the 67,546 oranges sold by males in the grade six textbook. This being the case, the ratio value of the highest sold commodity between the female and male sales is only depicted in grades three, four and seven textbooks. The value ratios for grades three and seven textbooks were in favour of male sellers. The ratio value was 10 shillings for a female sale to 667 shillings for male sale in the example picked from grade seven textbook. The example in grade four textbook has a value ratio of male to female of 10 to 31 shillings. It can still be interpreted that male selling capacities were as high as has also been noted of males possessing a higher purchasing power than females.

The kind of items sold corresponds to those depicted in the buying activities. Commodities that were sold by female characters were not only of less value but were also related to home consumption. These commodities include eggs, mangoes, pastry, and buns. The depicted big sale is that of Mwanaidi (a female) who sells 60000 kg of potatoes, 21,000 kg of groundnuts and 498,710 kg of maize. Such a situation was very encouraging in balancing the value of commodities sold by female as well as male characters. While the value of these agricultural products is not indicated, it is more interesting to note that it is stated in the mathematical problem that she owned the products. The mathematics problem reads like this:

*Mwanaidi aliuza baadhi ya mazao yake kama ifuatavyo ... (Mwanaidi sold some of **her** crops as follows...).*

It should be noted that apart from the picked examples, males were also shown to sell coconuts, beans, chickens, oranges and mangoes, chairs, trousers, oranges, goats, sweets, maize, and groundnuts. Women were also depicted selling timber and assorted shop items. As has already been noted, buying and selling can be associated with property ownership, which shows the status of an individual in a given community. The following discussion is based on the pegging of property ownership to male and female characters in the mathematics textbooks.

5.5.5 Depiction of ownership of property

The purchasing power and selling capacities of male and female characters correspond with the amount of property an individual possesses. The ability to buy and sell has to correspond with some kind of ownership of property and in most cases, money. The depiction of female and male characters in ownership of property can be traced from textbooks for grades two to seven. Both males and females have been shown to own some kind of property. Ownership of property is one of the indications of social and financial power possessed by an individual in a community (Raven 1958 cited in Gender Roles 1998). Possession or lack of property can determine the status of the individual and this status would also depend on the kind of property a person owns.

Table 5.24 summarizes the pegging of property ownership to female and male characters in the mathematics textbooks. In this table, the pegging has been classified into ownership of property depicted to both males and females. Table 5.25, however, shows ownership portrayed to females only and that owned by males only.

Table 5.24 Depiction of ownership of property to both females and males

Type of property	Frequency of depiction		Type of property	Frequency of depiction	
	M	F		M	F
Money	12	6	Chicken	3	4
Houses	7	3	Oranges/lemons and tangerine	5	3
Motor vehicle	1	1	Books	3	2
Farms	6	4	Ropes	2	2
Sacks of maize	6	1	Bags	1	1

Table 5.25 Depiction of property ownership by males and females separately

Type of property	Frequency of depiction to females	Type of property	Frequency of depiction to males
Bunches of bananas	1	3 mango trees	1
Bread	1	Mangoes	1
Potatoes	1	Envelopes	1
Plates, cups and tumbler	1	Sugar cane	1
A packet of flour	1	Pieces of wood	1
A bed	1	Carpet	1
Baskets	1	Livestock (cattle)	4

		goats and sheep)	
Sugar	1		

The information in Table 5.24 has been clustered into three groups. With the first cluster, where property has been pegged to both females and males, there are some features that stand out. The first kind of property is money where more males are depicted to own, compared to females (66.7% and 33.3% respectively). It can be speculated that the writers of the mathematics problems are showing the actual prevailing situation, because more men are engaged in activities that are remunerated and are supposed to have more money than women. In many cases women are engaged in reproductive and productive work, which is not remunerated (Keller et al 1999). Even when women engage themselves in productive tasks that yield subsistence products as well as commodities for sale, men control the income when these are marketed (Keller at al 1999; and Mukangara and Koda 1997). This situation where women are invisible in marketing activities has also been noted in Agriculture textbooks in Kenya. Men usurp the responsibility for marketing rice after harvest and for the proceeds from the sales (Obura 1991). Women are involved at all stages of producing rice but are excluded in the selling and deciding how the money should be used.

The depiction of ownership of houses to males and females can also be noted from the findings. While both women and men were associated with the ownership of simple houses (nyumba za msonge/local traditional grass-thatched roundhouses, p. 98, Book six), some male characters were shown to own modern houses built of bricks. Another modern house owned by a male was associated with a loan from a bank for constructing the house (See p. 12 of grade four textbook). Such a house built from a bank loan would necessarily be a modern house. There were no female characters associated with the ownership of modern and expensive houses or having received a bank loan for any purpose.

Women stand a narrower chance compared to men of being involved in transactions with financial markets. Most women, in particular, do not own property that could be used as collateral to guarantee them a loan. Female entrepreneurs have little access to credit due to

the small nature of their ventures, lack of property rights and inability to generate savings. Omari and Koda (1991 cited in Creighton and Omari (1995) have also listed factors that hinder women from having access to credit and loans. The factors relate to customs of most ethnic groups in Tanzania which hinder women from having either inheritance or ownership rights over land or other immovable property. These are the very items that are usually demanded as collateral property for bank loans.

One of the government policies is to empower women economically by credit provision. This is one of the commitments made by the government of Tanzania in 1995 at the Fourth World Conference on Women in Beijing. According to Mukangara and Koda (1997) this commitment is still a goal, which is being worked upon by both the government and NGOs. The constraints already mentioned above have to be looked into, if the government commitment is to be honoured.

As one scrutinizes property owned by females only from data, one notices a pattern related to the home emerging. Five types of the items owned by females are foodstuffs (bananas, bread, potatoes, flour and sugar). Household utensils, baskets and beds are possessions that are associated with the home. The items owned by females can thus be contrasted with those owned by males. Apart from the case of ownership of a carpet, which is homebound, the items owned by males are not related to the home. Ownership of three mango trees, planks of wood for carpentry, sugar cane, envelopes and livestock are the kind of possessions that in some instances can be considered of high status and value. Mango trees and livestock for example, can yield much money when sold. Ownership of livestock implies high economic status in most communities in Tanzania.

The prevailing situation in Tanzania is that women are grossly disadvantaged in livestock ownership (Mukangara and Koda 1997). The reason that accounts for the disparity where men own more livestock than women is that men acquire livestock through purchase, dowry, and inheritance and by exchanging them with other items. Women, in most cases neither control enough cash income nor inherit clan property that would enable them to own

livestock. It is said that even when they get a share of the dowry, it is usually just a few cows and goats compared to those received by males. Women who control food crops generally have such a minimal surplus that they cannot exchange the food crops for cattle or goats. Also, as it has been noted, women generally, unlike men, take the responsibility of food security for family members (Mukangara and Koda 1997 and Keller et al 1999). Keller et al (1999:17) for example, report:

“... Many men abrogate their responsibility to contribute to family livelihoods, drinking if they stay at home or abandon their families altogether.”

With the trend where more women are now involved in dairy cattle keeping in peri-urban areas, a depiction of livestock ownership by women could inspire girls to role model on livestock ownership. Such depiction would further remove the negative attitude among members of the community, especially males, that females cannot own livestock.

On the portrayal of farm ownership, some issues also need to be discussed and the accompanying explanation on the farms in the set mathematical problems. In the first instance, more male farm owners are presented compared to female owners. Looking at the problems, there is a difference in the way the problems are set, especially on the power owners have in the utilisation of the owned property and in this case, farms and land. Whereas females were portrayed as owning farms, all the four set problems were simply related to calculating areas given the width and length of such farms. When the situation is compared to farms owned by males, more issues can be depicted and these reflect to the power male owners have on what to do with these farms. It was depicted for example that:

- *“Mzee Jumbe gave part of his farm to his children” (Book six p. 47);*
- *“Ali gave his children 0.5 of his farm” (Book five p. 64);*
- *“Raimond planted sugar cane in an area of 0.4 of his farm” (Book five p. 70); and*
- *“Jumanne planted seeds on the area of $\frac{2}{8}$ of his farm” (Book four p. 45);*

The above examples show males have the power to decide on what to do with their farms. This can be associated with prevailing land ownership patterns by males and females in Tanzania. Various researchers (Keller et al 1999 and Mukangara and Koda 1997) have discussed the issue of land ownership in relation to males and females. Tanzania has different land tenure systems namely; clan land, village land and public land. According to Mukangara and Koda (1997) the patriarchal customary law governing the land tenure discriminates against women. Access to land is through inheritance, allocation, purchase and right of occupancy. It is therefore shown that most women do not own land on which they can work on (Mukangara and Koda 1997). According to Keller et al (1999) married women have rights to access, but do not have control or ownership of clan land and few are able to purchase land in their own right. This can probably explain the differences in the set mathematics problems. Although women have rights to access, they cannot decide on what to plant on the farms. The few women who own land should inspire writers to depict women as having power to make decisions on the land they own.

The ability of an individual to decide what to do with the owned property relates to giving. Apart from the discussed ownership of land where men have been shown to have the ability to apportion their farms to other people, fathers have been depicted as benevolent in giving land to their children. Males and females have been shown as giving other types of possessions to other people. The following discussion is on how male and female characters have been portrayed in giving property to other people.

Besides there being differences in the portrayal of ownership of property in terms of value and types of property, both males and females were depicted as being generous in giving their possessions to other people. Individuals were presented as giving fruit (oranges and mangoes) and money to others. A mother for example, was depicted giving bananas to her children, while Januari (a male) was also shown giving oranges to children. With money, Halima (a daughter) was depicted giving her father one-fifth of her salary. Three females, including two mothers, were depicted giving money to their children. A male character named Daudi and two other males were depicted giving money to children, not specifically stated as their own children. Daudi has further been portrayed giving his wife three quarters of his salary. He is

thus depicted as the breadwinner who provided his wife with some money for subsistence purposes.

What can be noted is that mothers have specifically been shown giving something to their children. The true picture in giving has however not been fully depicted. Mothers' involvement in the maintenance activities makes them good providers not only for their children but also to other members of family, including the husbands thus by confining the giving to children only, the mothers' giving role is trivialized (Obura 1991).

These findings in mathematics textbooks used in Tanzania slightly differ from findings noted by Davies (1995) and Obura (1991). In the Caribbean, Davies (1995) for example, showed that there was a line of demarcation between what was being given by males and that given by females. Men were portrayed as giving subsistence, money and food while women were depicted as giving incidentals like fruit, sweets and cakes. This giving was confined to family members. In Kenya men were also depicted as giving voluntary contributions to the community, which could amount to half or more of a man's monthly salary (Obura, 1991). Both researchers Davies and Obura, however, noted that this was not the real picture on giving, as the depiction did not describe the actual contribution made by females for the subsistence of the family. Obura (1991) has rightly pointed out the fact that the process of growing food crops until food is ready to be eaten involves several activities of planting, weeding, harvesting, carrying the harvest home, storing, processing and cooking. Women do all these activities. This is an important contribution/giving to all family members including to the husbands. Such depiction where maintenance activities carried out by women are undervalued, unremunerated and unrecognized in the national account is gender biased (Keller et al 1999, Mukangara and Koda 1997).

5.5.6 Portrayal of characters in association with technology

In mathematics textbooks, the only vivid depiction of use of technology is associated with transport, for example, the use of bicycles and motor vehicles as means of transport. Characters traveled to various destinations on foot or riding bicycles and using motor

vehicles. Table 5.26 shows the frequency of depiction in traveling and the means of transport used in grade textbooks for grades three to seven.

Table 5.26 Frequency of presentation of characters using different types of transport

Grade textbook	Character	Travelling on foot	Using bicycles	Using motor vehicles
3	M	1	-	-
	F	1	-	-
4	M	4	1	-
	F	1	-	-
5	M	1	-	-
	F	-	-	-
6	M	-	1	-
	F	1	-	-
7	M	3	3	4
	F	2	-	-
Total	M	9	5	4
	F	5	-	-

Data from Table 5.26 show that while both female and male characters have been depicted travelling on foot; no females were shown using the technology of bicycles and motor vehicles for transport. This depiction is not only biased against female characters but does not portray the reality in Tanzania. Females in Tanzania, for example, drive cars and ride motor vehicles. They also travel in buses and ride bicycles. It is true that more men than women use bicycles and motor vehicles. This can be explained in relation to the nature of activities and the bias of addressing men's needs in an effort to improve the transport sector. According to Mukangara and Koda (1997) women transport food produce, water, firewood and even sick children usually on foot. They however, record cases that exist in Mwanza, Shinyanga and Tabora regions where women have access to bicycles and use them in carrying out reproductive and productive activities. People who hail from Kyela and Kilombero districts narrate that both men and women ride bicycles, although there are more men than women who do so.

Closely related to the use of technology in transport is how characters have been depicted as travelers. In textbooks from grade three to seven, twelve males compared to only five females have been depicted traveling (70.6% and 29.4% respectively). Although females have been depicted walking, the distances they covered were not long compared to those covered by

males. For example, in the grade seven textbook, two examples can illustrate the distance covered by a male and female.

Example 1 (p. 112) *"Ngosha travelled 78 km by bus, 54 km by bicycle and 27 km on foot.*

Example 2 (p. 113) *Amisa travelled 12 km on foot to go to her farm.*

The situations where males are portrayed to travel longer distances than females can be attributed to various reasons. One of the reasons is that most reproductive work involving women is carried out at, and around, homes. Such activities as food processing, collecting firewood, fetching water and looking after the sick are homebound. The rigid traditional division of labor limits women's movements. Another reason that can be put forward as regards such portrayal and which could account for this situation is that male characters are often associated with strength, energy and courage, while females are considered weak and not energetic enough to travel long distances. This stereotyping of personality trait is also portrayed in sports related activities by male characters.

In mathematics problems, only males have been depicted as indulging in sports and related exercises. Five males were portrayed jogging around buildings, doing physical exercises, long jump and competing in athletic events around a rectangular field. No single woman was depicted in the set problems related to these sports activities.

5.6 Findings in English Textbooks

5.6.1 Introduction

The listing of the titles of the textbooks used in content analysis has preceded the presentation and discussion of the portrayal of gender roles in pupils' English textbooks. The categories that have been used in the analysis have also been presented. Based on each category, the findings have then been presented and discussed. A summary of the findings and discussion of the portrayal of gender roles concludes this section.

All textbooks currently used in teaching English from grades one to seven in most government primary schools have been content analyzed to determine the depiction of gender

roles in them. The following is the list of the content analyzed English textbooks and for each textbook the title of the textbook, publisher, year of publication and city of publication have been indicated:

- i. Tanzania Institute of Education (TIE). 1997. *English for Primary Schools: Pupils Book 1 Dar es Salaam*: Oxford University Press Tanzania;
- ii. Tanzania Institute of Education. 1997. *English for Primary Schools: Pupils Book 2 Dar es Salaam*: Oxford University Press, Tanzania ;
- iii. Tanzania Institute of Education. 1997. *English for Primary Schools: Pupils Book 3 Dar es Salaam*: Oxford University Press, Tanzania.
- iv. Tanzania Institute of Education. 1997. *English for Primary Schools: Pupils Book 4 Dar es Salaam*: Oxford University Press, Tanzania;
- v. Tanzania Institute of Education. 1999. *English for Primary Schools: Pupils Book 5 Dar es Salaam*: Aidan Educational Ltd;
- vi. Tanzania Institute of Education. 1999. *Primary English Course: Pupils Book 6 Dar es Salaam*: Ben and Company Ltd; and
- vii. Tanzania Institute of Education. 1999. *Primary English Course: Pupils Book 7 Dar es Salaam*: Ben and Company Ltd.

In the content analyzing the portrayal of gender roles in English language textbooks for grades one to seven, the following categories were used to determine the depiction of gender roles for female and male characters:

- Frequency of appearance;
- Work employment/occupations;
- Reproductive and productive activities;
- Association with the use of technology;
- Power in relation to property ownership and leadership;
- Leisure and sports activities;
- Personality traits/characteristics; and
- Language bias.

5.6.2 Depiction of frequency of appearance of characters

The calculation of the frequency of appearance of male and female characters has been determined using illustrated, named and unnamed characters. Data in Tables 5.27, 5.28 and

5.29 show the frequency of depiction of illustrated, named and unnamed characters respectively.

Table 5.27 Frequency of illustrated characters

		Frequency of illustrations in textbook for:								
		Gr.1	Gr.2	Gr.3	Gr.4	Gr.5	Gr.6	Gr.7	Total	%
Types of characters	M	15	97	77	78	21	75	60	423	59
	F	33	84	67	67	6	37	43	294	41
	Total	48	181	144	145	27	112	103	717	100.0

Table 5.28 Frequency of named characters

		Frequency of named characters in textbook for:								
		Gr.1	Gr.2	Gr.3	Gr.4	Gr.5	Gr.6	Gr.7	Total	%
Types of characters	M	4	7	82	18	35	29	48	223	58.1
	F	3	3	62	21	15	15	42	161	41.9
	Total	7	10	144	39	50	44	90	384	100

Table 5.29 Frequency of unnamed characters

Frequency of unnamed characters in textbook for:									
		Gr.2	Gr.3	Gr.4	Gr.5	Gr.6	Gr.7	Total	%
Types of characters	M	9	14	18	37	27	45	150	60.5
	F	11	8	21	21	12	25	98	39.5
	Total	20	22	39	58	39	70	248	100.0

Data in Table 5.27, Table 5.28 and Table 5.29 show the frequency of named and unnamed male and female characters in illustrations. Data in Table 5.27 show that the majority of illustrated characters in each textbook were males except in grade one textbook where there were 33 females compared to 15 males. The general trend of illustrations shows that the total number of male illustrations surpasses that of females by 18%. When we scrutinize the frequency of portrayed named characters there are more male named characters in almost all textbooks (grades one to seven) with the exception of textbook for grade four, where there are 21 females characters compared to 18 males. The total number of named characters is 223 (58.1%) out of which 161 are female characters (41.9%). Regarding unnamed characters, except for grade two textbook, where there are 11 unnamed female characters compared to nine males, in each textbook (three to seven) unnamed males are the majority. The total number of unnamed male characters in all six textbooks is 150 males (60.5%) in contrast to 98 of unnamed females (39.5%).

Looking at the frequency of portrayed illustrations, named and unnamed characters, what can be noted is that females have been underrepresented. This is true because the population of females to males in Tanzania is almost equal (Mukangara and Koda 1997 and Daily News Tanzania, 1 January, 2003). The under representation has a bearing on the portrayal of gender roles in other categories, which have been used in the content analyzing of the English textbooks.

5.6.3 Depiction of characters in occupational roles

In analyzing the pegging of occupational roles to female and male characters, the pegging was clustered into three groups. Grouping was based on occupations that had been pegged to males only, females only and occupations pegged to both characters. Data in Table 5.30 shows the different types of occupations pegged to male and female characters in the three clusters.

Table 5.30 Portrayal of employment to characters

A. Work employment depicted to males only				
Types of employment	Frequency	Types of employment	Frequency	
President	2	Ice cream vendor	1	
Cabinet Minister	2	Shopkeeper	3	
Village chairman	1	Pilot	1	
King	1	Librarian	1	
Reverend/Pastor	1	Professor	3	
Sailor	1	Drummer	1	
Painter	1	Dancer	2	
Carpenter	1	Professional boxers	2	
Shoemaker	1	Referee	1	
Bread baker	1	Bank clerk	1	
Authors of books	3	Agricultural officer	1	
Tractor driver	1	Writers of Textbooks/Poems	3	
Tailor	1	Livestock keeper	1	
B. Work employment pegged to females only		C. Occupations pegged to both females and males	M	F
Nurse	1	Teachers – Ordinary teachers	12	16
Secretary	1	Head teacher	2	-
Air hostess	1			-
Bus driver	1	Headmaster	3	1
		Market vendors	2	1
		Farmers	5	1
		Engineer	2	1
		Police	5	1
		Photographer	2	1
		Doctor	2	2
		Car driver	2	1
		Dancer	2	1

Several patterns regarding the findings can be noted from Table 5.30 as far as the pegging of occupational roles to female and male characters is concerned. The data has been clustered into three sub categories. Looking at the findings in the three sub-categories the following can be noted:

- In relation to only male and only female occupations, 24 titles were pegged to males and four were assigned to females;
- In the 10 occupations that have been pegged to both females and males, it is only in the teaching profession of ordinary teachers that more female characters have been depicted compared to male ones. The findings show that men have thus been presented in a wide range of occupations compared to women. A total of 43 fields of occupations were assigned to men while the combined number for the depicted jobs for women were only 12;
- Besides male characters being presented in a wide variety of jobs, they were also portrayed holding prestigious job positions, such as President or king. In the educational settings males were depicted as head teachers, headmasters and professors. What can be noted in the presentation of leadership positions is that, even within the same professional field like teaching it is only men who have been shown to hold leadership positions. In the teaching profession, 16 ordinary female teachers compared with 12 male teachers are presented. Although the number of male teachers was low, three men were presented as head teachers and three others were portrayed as heads of school/headmasters. No female teachers are depicted in leadership positions. Whereas there were three male professors presented, there was no single woman professor. Such depiction is false, as ordinarily there are women in such leadership positions, fewer as they may be. These should have been presented for girls to role model on them for leadership positions; and
- In the depiction of occupational roles, characters have been gender stereotyped. For example, while one woman is depicted as a bus driver (a job, which is traditionally considered to be a male occupation), the remaining three occupations were female stereotyped jobs. The fewer jobs that were allocated to women were for most part within the traditional domain. The depiction of women as nurses, airhostesses and secretaries in the employment sector is an extension of feminine activities carried out in homes and offices as nurturers, helpers and supporters. The allocation of jobs to men has also been stereotyped. Apart from portraying men in leadership positions, they are also portrayed

in masculine technical related jobs such as carpentry, shoemaking, painting and sailing occupations.

The depiction of occupational roles to women and men in paid employment in certain incidents shows what prevails in the Tanzanian society. In some circumstances, the portrayal did not however depict the reality. The gross disparities between men and women in salaried employment in Tanzania have been noted by different researchers including Keller et al (1999) and Mukangara and Koda (1997). These researchers have noted that men are employed in a far greater range of occupations and dominate almost all higher-level leadership positions. In contrast, women are concentrated at the bottom of the job hierarchy in a narrow range of sex-stereotyped occupations. Keller et al (1999), list such stereotyped employment as nursing, teaching and secretarial work.

These researchers have noted that there are several factors that hinder women involvement in salaried employment. Employment opportunities depend largely on education and level of development of science and technology. It is argued that with appropriate knowledge and skills, a person has a better opportunity of being employed. Mukangara and Koda (1997) have noted that 60% of women have a lower education status compared to 40% of men who are poorly educated. Of women in the professions, only 28% are in administrative jobs. This is a reflection of gender imbalance in education and training. For the majority of women who have never attained higher education, the chance for skilled jobs is minimal.

Mbilinyi (1995) cited by Keller et al (1999) gives other factors that attribute to the low numbers of women in paid employment and the low positions they hold in such employment hierarchy. These factors include:

- Women having unequal access to the job training and courses;
- Reproductive responsibilities interfering with work performance;
- Prevailing discriminatory attitudes that influence hiring and evaluation of women's job performance;
- Prevalence of stereotyped expectations about gender role behavior in the work place;
- The existence of sexual harassment at work places leading women who resist such advances to be discriminated against; and

- Women having negative images of their own capabilities and those of other women in the work place. One reason contributing to this state is the socialization process that negates against women raising their self-esteem and self-confidence.

The English textbooks depicted only males' occupations in 25 types of employment while four were pegged to females' only jobs. The reality on the other hand is that there are few females who enter professions that have traditionally been considered men's professions (Mukangara and Koda 1997). There are a few elite (urban based) women who are increasingly venturing into former male-dominated professions and trades such as engineering, plumbing, export business and other prestigious jobs with better pay. Women in these professions and trades should be depicted by textbook writers with the objective of presenting role models for girls. Continuing to portray occupations in the traditional patterns will have less impact on addressing gender imbalance in occupations, which prevail in our societies.

5.6.4 Portrayal of reproduction and productive activities

Both reproduction and production activities are necessary for the survival of the household members. The reproductive activities confined to women relate to pregnancy, childbirth, and breast-feeding. Traditionally, child rearing and activities related to the maintenance of the family are also considered as women's roles. Productive activities also contribute to the income and economic welfare and also advancement of the household. To both women and men, this relates to cash and subsistence farming. Table 5.31 shows how female and male characters have been presented in the reproductive and productive roles.

Table 5.31 Presentation of reproductive and productive activities to characters

Types of activity	Frequency		Types of activity	Frequency	
	M	F		M	F
A. Food preparation related activities			D. Agricultural related activities		
Cooking and making butter	2	7	Planting trees	4	3
slicing oranges	-	1	Watering flowers	2	2
Shopping for foodstuffs	-	3	Digging	3	-
Baking a cake	-	1	Farming	6	4
Fetching water	-	1	Harvesting maize	1	-
Preparing tea	-	1	Planting rice	-	1
Pounding (maize)	-	1			
B. Child rearing activities			E. Purchasing and selling activities		
Holding a baby	1	1	Buying beer for a family party	1	-
Feeding a baby	1	1	Selling items in a market	1	1
Taking a child to a clinic	-	1			
C. Home maintenance related Activities					
Washing clothes	1	-			
Mending clothes	-	1			
Washing dishes	-	2			
Sweeping the floor/ground	2	2			

Data in Table 5.31 reveal some notable findings within the sub-categories of reproductive and productive activities of food preparation, child-rearing, home maintenance, purchasing and selling agricultural related activities. The following can be noted:

In activities related to preparing meals more females than males were shown. While female characters were presented involved in seven different activities, males were portrayed demonstrating the different steps in preparing butter and cooking “ugali” (stiff porridge). This depiction can be considered progressive in creating gender balance in presenting female and

male characters in textbooks. In this situation males have also been involved in reproductive work in the home, which is traditionally considered “feminine” work. While this shows that there has been gender awareness among editors and authors what prevails outside the home where some activities become paid employment has not been well described. In big hotels, for example, the majority of cooks are males and these take such leadership positions as head cooks (Keller et al 1999).

It should be noted however, that the subject of Home Economics taught in secondary schools is in most cases studied by girls alone. Home Economics, which is generally associated with food preparation and home care, has hidden messages that the subject is for girls only. When it comes to paid employment as cooks and waiters in hotels the majority of the employees are men. Even in higher institutions of learning, like universities more males than female students study Home Economics. It has also been noted throughout the findings of this study, the activity of washing clothes, which is not remunerated when, performed in the home for family members, was depicted to be a female activity. There are few exceptions where males have been depicted washing clothes for family members such as a father illustrated washing clothes for a daughter in Social Studies textbook for grade 3 p.28. The story changes when such activity involves males and is remunerated. This has for example, been depicted in the Kiswahili textbook for grade four, where the work and skills in washing and ironing clothes are portrayed to a male by the name of Maridadi (p.75-78). Laundry is self-employment and is remunerated.

An interview with the Manager of the Book Management Unit (BMU) of the Ministry of Education and Culture in Tanzania has indicated that there have been some efforts to create gender awareness in the production of school textbooks. This is done through training of personnel involved in textbook production in publishing houses and also textbook evaluation. Some managers have observed that certain editors of school textbooks were gender sensitized while others were not. Foreign expatriates were deployed to publishing houses during the Pilot Publishing Project (PPP), 1994 to 2002, in order to ensure that the textbooks produced were gender sensitive. A manager of one publishing house interviewed narrates that at one stage he had to sit side by side with the expatriate who emphasized the kind of illustrations to be depicted in the science textbook so as to ensure gender balance. Both the training and the deployment of expatriates to publishing houses paid dividends in portraying of gender balance and also doing away with gender stereotyping as the following illustrations in

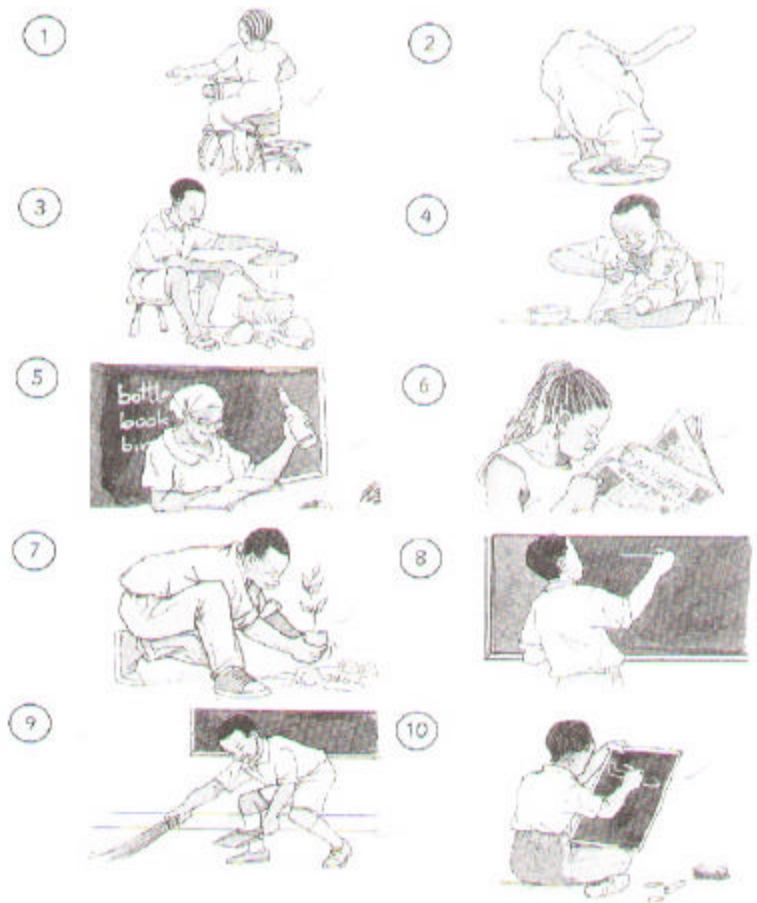
Kusoma, English and Science textbooks have been presented. Figures 5.5, 5.6 and 5.7 of Kusoma, English and Science textbooks can suffice as examples of the balanced illustrated male and female characters in terms of frequency of appearance of characters and also the depiction of activities, which is not gender stereotyped.

Figure 5.5: A boy is cooking



Source: *Kusoma 3* (p.18). The boy is illustrated cooking. This can be contrasted with the depiction in figures 5.8 and 5.9. It should be noted that the first edition of this textbook a girl was illustrated.

Figure 5.6: Characters portrayed in activities that are not gender stereotyped



Source: *English for Primary Schools: Pupil's Book 2* (p.27). The illustrated males and females have been presented in a non-traditional manner, whereby males are portrayed carrying out activities that are considered feminine and females are carrying out activities that are traditionally considered masculine.

Figure 5.7: A boy and a girl washing clothes with hard and soft water



Source: *Sayansi 5: Kitabu cha Mwanafunzi: Kitabu cha Tano* (p.45). Both a girl and a boy are shown washing clothes, an activity which is traditionally considered feminine. This has been a 'departure' from most textbooks that have been content analyzed in this study.

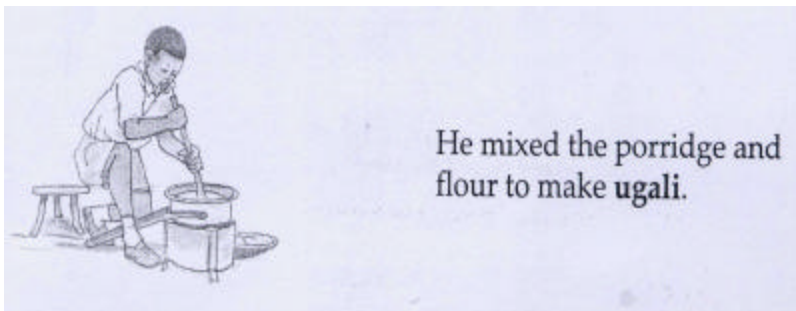
The training and the use of experts during textbooks production was done to ensure the desirable depiction of gender balance and equality in the textbooks. According to the interviewed manager, there was no way the ideas suggested by this expatriate could be refused. Such awareness was not accompanied by sensitization on the personnel in publishing houses including illustrators, editors and writers on the importance of the production of gender friendly textbooks. This situation has created problems in some of the illustrated characters in textbooks, as they are not realistic. Examples of such unrealistic depiction can be noted in the two illustrations (figure 5.8 and 5.9) involving two males cooking.

Figure 5.8: A man is cooking



Source: *English for Primary Schools: Pupil's Book 3* (p.13). The man is supporting the pot in the wrong way. An example of a misrepresentation of a cooking activity. The man is supporting the pot with a stick in the wrong direction and the fire is so close to his thighs hence his safety is at stake.

Figure 5.9: A boy cooking stiff porridge



Source: *English Language for Primary Schools, Book 5* (p.16). The way the boy is supporting the pot is wrong. Usually, it is not the knee that presses the stick but the lower side of the foot, to avoid being burnt.

In figure 5.8 and 5.9 the safety of the depicted man and the boy who are cooking is in question. The man is sitting too close to the fire and one would doubt the ability of the man to achieve his objective. In figure 5.9 the helping wooden instrument is not pressed using the knee as presented. Usually the lower part of the foot is used to support the stick and not the knee, as the knee will easily get burnt if it is used as illustrated. So in gender balancing the involvement of females and males in maintenance work such as cooking, reality in carrying out such activities should be adhered to, otherwise the portrayal would appear ridiculous, as has been the case in the two illustrations. In depicting the carrying out of child rearing

activities, writers have in some occasions tried to involve both male and female characters. Both males and females have been depicted taking care of the baby by cuddling it and feeding it.

It is only the women who have been depicted taking a baby to a clinic. The involvement of both males and females in child rearing practices as has been noted is a gender positive move in writing textbooks. Child rearing activities are considered 'feminine' as women are considered better equipped than men to keep the family together and are naturally gifted in this regard (Basow 1993). Such thinking implies that women should remain in the home to serve the family since they are associated with kindness, patience and submissiveness.

It is important that both fathers and mothers are responsible for the different tasks of child rearing in the day to day care of children, showing affection, discipline, helping with problems, behavior related to school and health in the family. The story of 'Chiku the Naughty Pupil' (Pupil's Book Six p. 51) depicts the father as being irresponsible in child rearing activities and does not therefore portray a positive role model as a father. The child rearing activities are relegated to Chiku's mother. This sentence depicts the story of an irresponsible father (Unit Eight p. 51 of Book 6).

"Her father was a long-distance lorry driver, who was often away from home. Even when he was not on a journey, he did not stay at home unless he had no money."

It is important through socialization and the use of textbooks in schools to create awareness that men and women should be equally responsible in the rearing of children. Efforts should be made to remove barriers that hinder male members from being able to indulge in child rearing. Males should manage their time for work and other activities so as to have time to involve themselves in home maintenance activities.

The societal attitude that child rearing is not manly should be reversed using different socializing agents including the school. In Tanzania, the integration of Family Life Education in primary, secondary and teacher education levels is one of such efforts implemented towards equipping learners with knowledge and skills of responsible parenthood.

In Tanzania secondary schools and teacher training colleges for secondary schools for example, the topic 'gender' has been integrated in the curriculum. This is not, however, the

case with primary school curriculum. The objective of teaching this topic in secondary schools is among others to create awareness on the learners of the negative consequences on the different aspects of the society when gender inequality prevails. In the Civics Teacher's guide for forms three and four (MOEC 2001), some of the Family Life Education (FLE) gender related topics integrated in Civics subject include:

- The role of women in the national economy (p. 1 to 9);
- Gender equality and empowerment (p. 10-18);
- The effects of customary law on the status of the girl child (p. 64-70); and
- Social- cultural practices affecting women and their reproductive health (p. 71-76).

In teaching the above Civics topics the instructional objectives aim at the creation of gender awareness so as to enable students to:

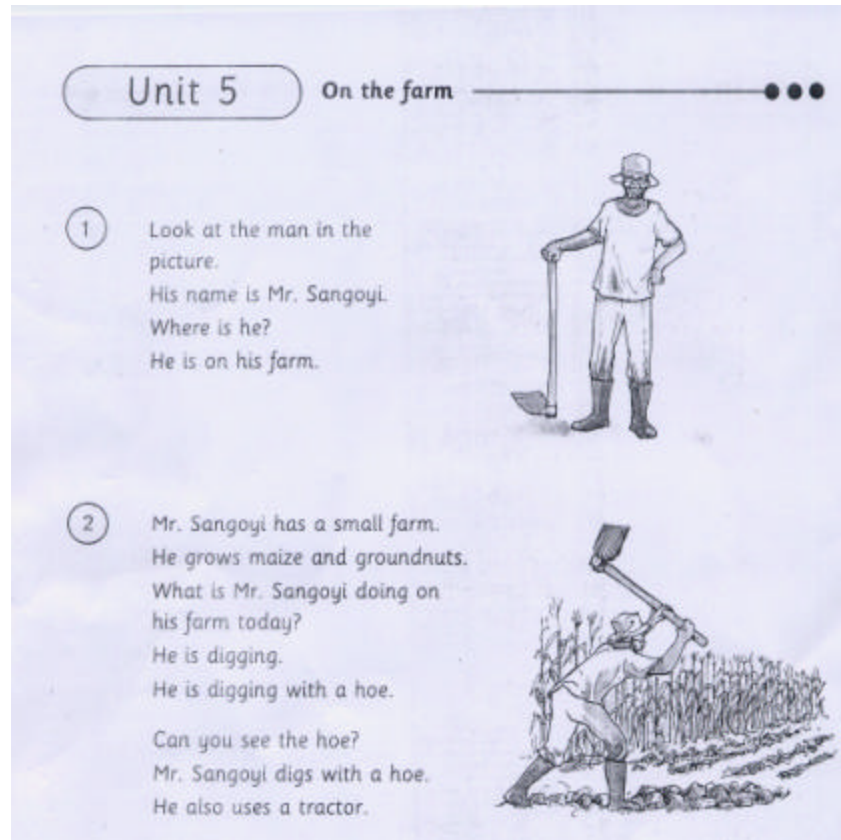
- Explain factors which hinder women's full participation in the national economy (p. 2);
- Outline methods of empowering women and the importance of women empowerment in economic development (p.2 and 10);
- Identify some of the inequalities between men and women (p.10);
- Explain how equal opportunities for men and women can be fostered (p.10); and
- Suggest measures to be taken to eliminate customary laws that adversely affect gender equality (p.64).

The inclusion of such topics is one of the efforts towards creating gender equality and awareness in the schooling system and making the curriculum gender inclusive. These efforts should at the same time involve other socializing agents in the society by creating gender equality awareness as depicted in the above FLE instructional objectives.

On the portrayal of characters in farming activities, again, the reality has not also been well-depicted in English textbooks. The fact that more male farmers have been shown does not portray the prevailing situation. The reality in Tanzania is not presented since 80% of males and 20% females have been depicted as involved in agricultural activities. As has already been noted and discussed, more women than men in Tanzania are involved in agricultural related activities (Keller et al 1999:39). The English textbooks are, therefore, not showing the reality as the percentage of women involved in general crop production is 56% while women involvement in food crops production is 75% (Keller et al 1999:39).

The absence of Tanzania women farmers in carrying out farming activities is well depicted in English Pupil's Book Four (p. 28 and p.29). In Unit five for example, entitled 'On the Farm', the following illustrations in figures 5.10 and 5.11 depict the invisibility of Mrs. Sangoyi in the agricultural sector when compared to Mr. Sangoyi.

Figure 5.10: Mr. Sangoyi is carrying out farming activities in his farm using a hoe



Source: *English for Primary Schools: Pupil's Book 4* (p.28). Mr. Sangoyi is depicted carrying out farming activities. Mrs Sangoyi is not shown.


Figure 5.11 Mr. Sangoyi is farming using a tractor




Source: *English for Primary Schools: Pupil's Book 4* (p. 29). The illustration depicts Mr. Sangoyi using a tractor. Mrs. Sangoyi is not shown.

Figure 5.12: Mrs. Sangoyi and children are going to the farm by bus

4 Mrs. Sangoyi also goes to the farm. She doesn't go there on a motor cycle. She doesn't go there on foot either. She goes there by bus.



5 On Saturdays Mr. and Mrs. Sangoyi's children go to the farm to help their parents. They also go there by bus.



The image contains two numbered text blocks and two illustrations. Block 4 is at the top left, block 5 is at the bottom left. The top illustration shows a bus with 'MASUMBA TRAVEL' written on its side. The bottom illustration shows a group of children, including a girl with a suitcase, boarding a bus.

Source: *English for Primary Schools: Pupil's Book 4* (p.29). Mrs. Sangoyi is not depicted carrying out farming activities but is shown going to a farm with the children.

What can be inferred from the above text in Unit Five has been the fact that Mr. Sangoyi has been presented as the real farmer who carries out the different farming activities. He owns the farm (his farm). Mrs. Sangoyi, the wife has not been depicted in farming activities.

“Mrs. Sangoyi also goes to the farm” but the activities she carries out in the farm have not been indicated. It is only stated, “She goes there by bus”.

In textbook for grade three (Unit 5, p. 17 and Unit 7, p. 29) two pairs of male and female farmers have been depicted in teaching the present tense in English. The two illustrations in figures 5.13 and 5.14 depict the two situations.

Figure 5.13: A husband and wife carrying agricultural products from the farm



Source: *English for Primary Schools: Pupil's Book 3* (p.17). Both the woman and man are depicted involved in farming activities and also carrying farm produce.

Figure 5.14: A wife and husband carrying farm products



Source: *English for Primary Schools: Pupil's Book 3* (p.290). Compared to the man, the woman is carrying more farm produce. Sometimes the argument put forward is that in case of danger the man would defend the woman hence he holds a weapon.

The way in which males and females have been depicted in figures 5.13 and 5.14 needs to be discussed and commended upon. Unlike the previous presentation where Mr. Sangoyi is presented as the only farmer in the family; in the figures 5.13 and 5.14 both the man and the woman have been presented as farmers. While males are usually considered stronger than females and often depicted so in textbooks, it is however the women who have been shown carrying heavier loads. While in figure 5.13 the man is shown carrying a hoe and three pieces of cassava, the woman is carrying a bunch of bananas and an axe. In figure 5.14 the woman is carrying a basket full of food items and sugarcane on her head, while the man is carrying only a hoe and a panga. The two illustrated women in the two figures have been depicted carrying more loads, than their male counterparts.

Researchers in Tanzania have noted the depiction of females in carrying more loads than males. This is especially true in relation to transporting farm produce. According to Omari (1980) cited in Creighton and Omari (1995) women compared to men are involved in transporting farm produce on their heads or backs to food stores. It is estimated that women (Creighton and Omari 1995:145) do 70% of portage crops from the field. While men would clear the land, they would pay little attention to other farm activities except those, which use modern technology like pruning and application of fertilizer and pesticides. Depicting men using modern technology has also been discussed in the presentation of findings from Social Studies textbooks.

In grade five English textbook (p. 47) an old hard-working woman was depicted as a good rice farmer. In the narration the rice she planted grew very well, but an ugly bird came and ate the rice. This episode led to an unpleasant situation where one character is reported to have broken his leg as a result of chasing a dog, which had eaten the roasted bird. One interpretation of the story could be that the old woman caused some calamities to her relatives in carrying out her farming activities. It is unfortunate that old women are associated with evils in the society. This has also been depicted in the Kiswahili textbooks that have been content analyzed with accompanying discussion as to some of the reasons that account for elderly women being labeled as and associated with witches (See section 5.7.11.1).

5.6.5 Presentation of leisure and sports activities

Apart from the depiction of textbook characters in employment, reproductive and productive activities, characters have also been depicted in leisure and sports activities. In many cases, after an individual has been involved in different activities, be it in paid work, unpaid work (productive and reproductive); it is healthy to rest and relax leisure and do sports. The depiction of leisure and sports activities to female and male characters is found in Table 5.32.

Table 5.32 Depicted leisure and sports activities by gender

Type of leisure/ sports activity	Frequency		Type of leisure and sports activity	Frequency	
	M	F		M	F
Playing football	11	-	Playing traditional games ('mdako ' and 'bao')	2	3
Tourism	4	-	Reading newspapers	1	3
Blowing a horn	1	-	Boxing	2	2
Flying a kite	1	-	Riding bicycles	2	1
Car race	-	1	Dancing	2	1
Reading books	-	3	Running/jogging	2	1
Riding a donkey	-	1	Singing	1	1
Playing netball	-	4			
Watching television	-	1			
Athletics	-	1			

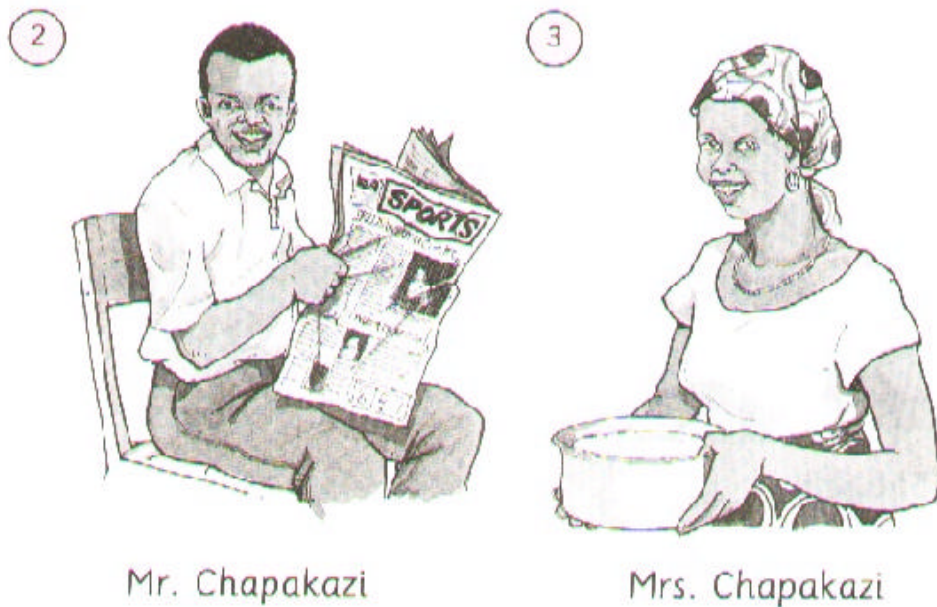
Data in Table 5.34 show that both males and females were portrayed in leisure and sports activities. A closer look at the findings depicted on Table 5.32 show that there has been gender balance in the depiction of characters in leisure and sports activities. For instance, both genders have been portrayed playing traditional games, reading newspapers, riding bicycles, dancing, boxing, jogging and singing. Males have been portrayed playing football, in tourism, blowing musical instrument and flying a kite. Females are depicted playing netball, watching television, participating in athletics, riding a donkey and car racing.

A closer look, however, reveals that there are issues in the portrayal of leisure and sports activities that need our attention as far as writing gender sensitive textbooks is concerned.

Two examples can illustrate the point in relation to soccer and netball games, and reading newspapers. While soccer (a boys' game) has been depicted in the five English textbooks, netball (a girl's game) has only been portrayed in two textbooks. In these incidences, there are 26 boys illustrated in relation to soccer and only seven girls who have been shown playing netball. This portrayal has shown girls being underrepresented in netball game (which is a girl's game) compared to boys' game of soccer. This depicts what prevails in the Tanzanian society as far as these games are concerned. No great emphasis has been given to netball compared to soccer in terms of budgeting in schools and the society at large. As has been noted, netball has not been given full treatment like boys' ball games in Vocational Skills textbooks in this study. This is not surprising given the fact that in most cases the girl child has less leisure and less outdoor time to play since she is expected to assist her mother who has more indoor productive and reproductive activities to perform than her father (Mukangara and Koda 1997:47).

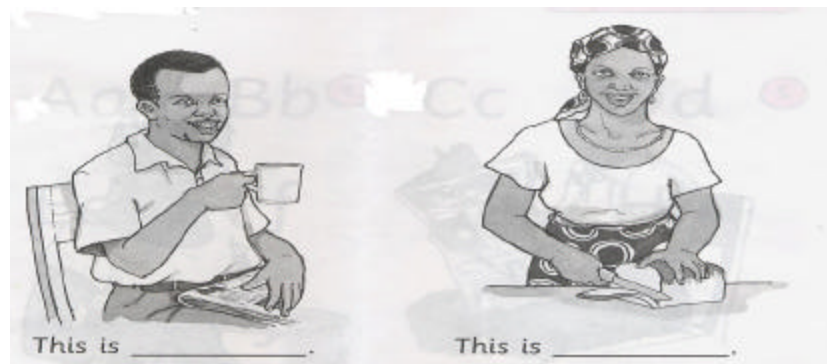
Another example in relation to leisure activities is that of reading newspapers. A man has been depicted reading a newspaper in grade one English textbook, while there are three women reading newspapers in grade two textbook. What can be observed in the leisure activity of reading newspapers are the differences depicted between male and female readers. In grade one textbook for example, Mr. Chapakazi is reading a newspaper while Mrs. Chapakazi (his wife) is holding a cooking pot (p. 21 illustrations two and three). Mrs. Chapakazi is probably on her way to prepare something for Mr. Chapakazi and probably other family members. In illustration number six (p. 22), Mr. Chapakazi is drinking something while Mrs. Chapakazi is slicing bread. Mr. Chapakazi is sipping "tea" while the newspaper is on his lap. So while Mrs. Chapakazi is involved in reproductive work in food preparation for the upkeep of the husband and other family members, Mr. Chapakazi is empowering himself with the acquisition of information from newspapers. The women portrayed reading newspapers are reading in isolation and no relationship is shown with other people. Figure 5.15 and 5.16 illustrate the relationship between husband and a wife in this regard.

Figure 5.15: Mr. Chapakazi is reading a newspaper while Mrs. Chapakazi is doing household chores



Source: *English for Primary Schools: Pupil's Book 2* (p.21 and 22). The depiction of Mr. and Mrs. Chapakazi in figure 15 and 16 is a true presentation of what prevails in most families in Tanzania (Keller et al 1999 and Mukangara and Koda 1997). There is a gender division of labour as well as the portrayal of leisure activities such as reading.

Figure 5.16: Mr. Chapakazi is drinking tea while Mrs. Chapakazi slices bread

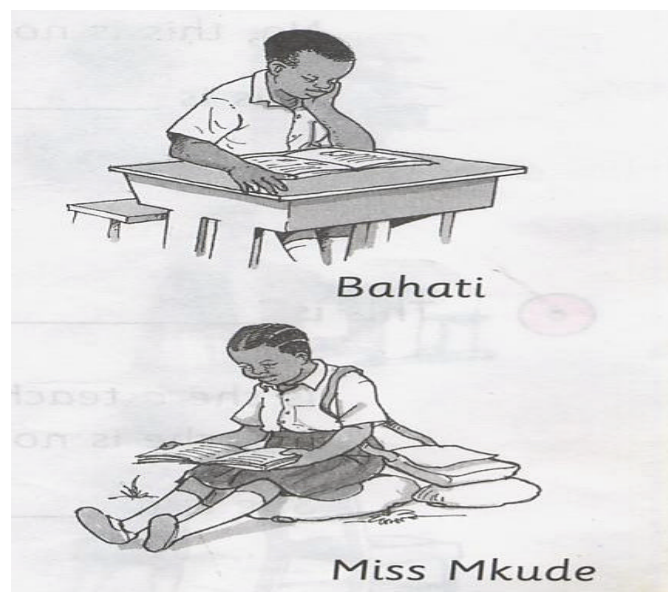


Source: *English for Primary Schools: Pupil's Book 2* (p.22). Note the female serving the man with a drink and bread. The man is taking tea with the newspaper on his lap.

The writers of the English textbooks have portrayed what prevails in the community in most of the families as far as division of labour is concerned. An activity such as cooking which is "*domestic work*" is regarded as "*women's work*" (Keller et al 1989). Domestic activities such as cooking are taken as "natural" for female members of the family and the order of things. It is taken for granted that while a husband would be watching TV or reading a newspaper as it has been depicted for Mr. Chapakazi, Mrs. Chapakazi would be preparing food for family members. The gender division of labour is rigid and not fair as it over- burdens female members of the household in doing domestic work. Females therefore, have less leisure time compared to the male counterparts within the household. The issue of the socialization of children into a rigid gender division of labour has been discussed in the presentation of the portrayal of gender roles in Kiswahili textbooks (Section 5.7.12).

Echoing the same message that males are supposed to carry out their activities in a more comfortable manner and positions, a boy named Bahati and a girl named Miss Mkude, have been depicted reading. The differences how and where Bahati and Mkude are studying have been well presented in figure 5.17.

Figure 5.17: A girl and a boy are studying



Source: *English for Primary Schools: Pupil's Book 3* (p. 36). Both Bahati and Miss Mkude are studying but the boy is sitting in a desk while the girl is sitting on a broken brick. This is a typical situation in most Tanzania government primary schools. Because of the socialization process of boys being aggressive, most teachers do not address this issue and it is expected that the girls can compete with the boys in the academics in such environment.

The effects on the learners through reading such illustrated presentations are that males are more privileged and are supposed to carry out certain activities in a more comfortable environment. Casual discussion between the researcher and primary school teachers and school pupils has indicated that what has been illustrated in the figure 5.17 is what prevails in primary schools in Tanzania. Where there is shortage of desks in a classroom, what can be noted is that because of being privileged, it is the boys who in most cases sit on desks. The girls must make do with (sit on) pieces of bricks or wood. The situation is worsened as most teachers do not intervene to arrest this situation, which is a perpetuation of what prevails in the larger society. Such depiction is one of the examples showing the superiority of males over females in different aspects of life settings in a patriarchy system (Keller et al 1999).

5.6.6 Depiction of characters in association with technology

In carrying out different reproductive, productive and community activities, the use of technology has been pegged to both female and male characters. This association of technology to characters indicates the status of characters in several ways. For example, the use of a modern or new form of a given technology depicts possession of power in terms of knowledge and skills related to the given technology. The use of technology makes the carrying of a given activity much easier. Table 5.33 shows the depiction of characters in association with technology.

Table 5.33 Character pegging in association with technology

Types of technology	Frequency of depiction	
	Males	Females
Motor car/ land rover/ bus/tractor (Driving)	10	7
Motor bike (Riding)	6	3
Bicycle (Riding)	9	1
Wheelbarrow (Fetching water)	1	-
Pushing a cart	1	-
Television	4	-
Sewing machine	1	1
Using a typewriter	-	1
Using a camera	2	1
Electric bulb (Fixing)	1	-
An airplane (Piloting)	1	-
Electric cooker (Cooking)	2	-

Data in Table 5.33 show that more males than females were presented in association with various types of technology. Males have been linked to nine types of technology compared to the six types that were associated with females. These have included using motor vehicles such as cars, a bus, and motorbikes. Cameras and bicycles were linked to both males and females. For females, there were some technological gadgets or tools that were associated with them. These included a wheelbarrow, a cart, an electric bulb, a TV and an aeroplane. Women were depicted using a typewriter and a sewing machine.

The findings show that the different types of technology that were linked to both males and females have been gender stereotyped in relation to the carrying out of reproductive and productive activities. For example, a woman was linked to a typewriter, which can be linked to a typist or secretarial. A woman was depicted with a new sewing machine (Pupil's Book Three, p. 42). It is however, not shown whether she was as a tailor or a cloth mender in the family. In contrast to such depiction, a male who has been portrayed with a sewing machine was shown as a tailor (Pupil's Book four p. 44). The woman with a sewing machine could probably be using the machine in mending clothes (an activity which in most cases is not remunerated) for the family members. Mending clothes is a reproductive activity compared to a productive role of being a tailor, which in this case is pegged to a male tailor. The prevailing situation as regards tailoring work has not been realistically presented in English textbooks. There are an equally big number of women tailors with tailoring marts.

The use of wheelbarrows and carts as a monopoly of males has already been noted and discussed in Social Studies, Science and Kiswahili textbooks. Carrying out activities using wheelbarrows and carts makes the work or job easier. This is especially true in fetching water. Women fetch small amounts of water by carrying the containers on their heads, but males use wheelbarrows to fetch larger amounts of water. As has been noted in most cases, water fetched using wheelbarrows and carts are for commercial purposes (for sale). This phenomenon is common in urban areas where whenever there is water shortage, male water vendors use wheelbarrows to fetch water for selling. Most women would fetch water for their domestic use.

What has been portrayed in the use of technology shows that more men have been shown to use modern technology. More men have for example been depicted driving cars, lorries, tractors; riding motorbikes and bicycles and using a tractor to supplement the hoe in farm

activities. More men have been linked to TV in advertising and buying. In the day-to-day situations in a home, it is the males who have the time to watch TV. Most women do not have the time to watch TV programs as they are always busy with reproductive tasks of maintaining the home. Males have also been associated with the use of electric cookers. The discussion in this study has shown that on the introduction of technological devices to assist in carrying out productive and reproductive work it becomes easier for males to participate in such activities. Both a girl and a boy have been linked to technology in using a telephone. What has been depicted in the use of telephones by both male and female characters is what prevails now in Tanzania, where the use of mobile phones is now common to both males and females.

5.6.7 Portrayal of ownership of property

As has been noted elsewhere in this study, the depiction of property ownership shows the status of an individual in relation to possession of power. The kind of goods and assets, the durability of the owned property and the value of the property an individual owns would determine the status of a male or female character in a given community. The findings of the depiction of the ownership of property are shown in Table 5.34.

Table 5.34 Depiction of ownership of property

Type of property	Frequency		Type of property	Frequency	
	M	F		M	F
Motor car	6	2	Motor bike	4	-
Bicycles	5	1	Bus	4	-
Farm	2	1	Tractor	1	-
House	3	1	Lorry	2	-
Umbrella	7	3	Hoe	2	-
Books	2	2	Shop	4	-
Ball	6	1	Cat	4	-
Camera	2	1	TV	1	-
Children	2	2	Watch	1	-
Bag	2	2	Coat	1	-
Sewing machine	-	1	Shirt	2	-
Cup	-	1	Bank account	1	-
Skirt	-	2	Suit case	1	-
Handkerchief	-	1	Shoes	1	-

Money	-	1	Sticks	5	2
Bucket	-	1	Wooden box	1	-
Golden ring	-	1	Jacket	-	1
Newly born baby	-	1			

Data in Table 5.34 show that property ownership has been grouped into three clusters. The first cluster is the type of property whose ownership has been depicted to both males and females. The second cluster of property ownership is that which has been pegged to females only and the third cluster of pegging is the type of property owned by males only. In the first cluster where ownership of property has been depicted to both males and females, more males have been presented as owners of a variety of properties. It is only in the ownership of books, children, bags and sewing machines that the frequency of depiction is in a one to one ratio.

Some comments need be made on the two clusters of ownership, namely that of females alone and that of males alone. The pegging of property owned by females alone is gender stereotyped. Ownership of a cup, bucket and newly born baby can be associated with reproductive activities in a home. Males have not been depicted as owners of property that relates to home maintenance activities.

The depiction of ownership of sticks as pegged to both males and females also needs some comments. First more males than females have been associated with the ownership of sticks. Possession of sticks depicted in the textbooks is at times associated with helplessness due to age, as a symbol of authority and sometimes associated with violence. In the English textbooks it is only the old women and not the old men who have been depicted with sticks showing helplessness. Two old women (figures 5.18 and 5.19) are shown unable to walk fast and have to use a stick to help their mobility. On page 49 of Book Four, it is narrated that:

- “Nyakomba is 92 years old.... She cannot walk quickly. She always walks slowly with a stick”.

Figure 5.18: Nyakomba is walking using a supporting stick



Source: *English for Primary Schools Book 4* (p.49). The old woman, Nyakomba is shown being weak and relies on a stick to walk.

In another illustration, a second old woman was also shown using a stick and that apart from being shown as physically weak, the narration in the story depicts her as a stupid old woman. In the story the leopard eats up the old woman after having saved it from being killed by hunters. This is shown in Book Four, p.16. The depicted stupid old woman in the story is shown in figure 5.19.

Figure 5.19: An elderly woman saves a leopard, only to be mauled later by it



Source: *Kusoma: Kitabu cha 3* (p.50). The old woman is illustrated as weak. She has also in the story depicted as stupid. She saves the leopard from being killed by hunters, only later to be eaten by it.

The second interpretation related to possession of sticks can be linked to issues surrounding violence. It is the males who have been shown to possess sticks that are linked to violent related episodes. On p. 37, Book Three, a boy named Matata has been shown beating a small boy with a stick. Male teachers have also been depicted carrying canes, around the school. Female teachers have not been depicted that way. The impression one gets from this depiction is that male teachers in schools are charged with maintaining discipline through the use of the cane. This depiction can have negative socialization effects on learners. It is reported that in the Tanzania communities incidences of violence against women and children are rampant (Mukangara and Koda 1997:58).

It is said that individuals who are shielded by customs, traditional practices and law perpetrate violence against women and children in Tanzania. In some Tanzania cultures for example, wife beating, which is domestic violence, is socially acceptable. This is contrary to the statutory laws, which consider wife beating a crime (Mukangara and Koda 1997:59). The physical, mental and psychological harm that is caused by wife beating is widespread. It is said that in communities where culture allows this practice, the community does not take strict measures against the use of violence. This condoning of violence against women and children that an informally accepted practice in the society should not be perpetuated by hidden messages through textbooks as has been shown. The socialization of boys into committing negative behavior has been discussed in Section 5.6.11 of this study.

When we scrutinize the kind of property owned by males only, several interpretations can be made. Apart from the type of property that can typically be associated with males such as a coat, jacket and shirt (as opposed to skirt for females), males have been depicted to property ownership, which is of a higher status and value. Such property ownership can be associated with ownership of economic and information power. The depiction of ownership of such property as buses, lorries, tractors, a shop and having a bank account act as means of production and can generate income to the owner. In most communities in Tanzania, ownership of TV does not only depict economic power but also as a means of acquisition of information power. Both economic power and informational power can empower a person to acquire leadership positions in the society. In the following section the findings on the presentation and discussion of the portrayal of leadership positions in the English textbooks are narrated.

5.6.8 Depiction of leadership positions to characters

Apart from the possession of power based on ownership of property where the owner has the ability to influence others by rewarding and punishing other people through use of property, possession of power can also influence the leadership position an individual holds in a given society. Such leadership presentation to characters empowers an individual to influence the behavior of other people by having expertise, legitimate title and leadership position. The depiction of characters in leadership positions shows the status (high or low) accorded to an individual. The kinds of leadership positions portrayed in English textbooks are found in Table 5.35.

Table 5.35 Depiction of leadership positions to characters

Types of leadership	Frequency of depiction		Types of leadership	Frequency of depiction	
	M	F		M	F
A. Educational settings			B. Political settings		
Headmaster	1	-	President	1	-
Head-teacher	2	-	Cabinet Minister	1	-
Professor	1	-	Agriculture Officers	4	-
School captain	2	-	Father of the nation	1	-
Head-boy	1	-			
Choir leader	-	1	Village chairman	1	-
Time keeper	1		C. Sports setting		
			Referee	1	

Data in Table 5.35 show that only one female has been presented in a leadership position compared to 11 leadership positions pegged to males. Even the depicted position of a female being a choir conductor is not that much a prestigious leadership position compared to those depicted to males. Leadership positions presented to males include being a ‘President’ of a country, a cabinet minister, village chairman in political settings and as head teachers, professors and a head prefect in educational settings. Being a choir conductor does not necessarily depict her having the ability to compose songs. Koza (1994), for example, has noted the depiction of gender stereotyping in music activities in middle school textbooks in the USA. Koza (1994) noted that the findings on female participation in music were

minimal. In the English textbooks content analyzed, there are related findings to the study by Koza (1994). This is in relation to the use of music instruments and in this case the use of drums. In the three incidences where the drums have been depicted, there is no single female character shown using the drum as a musical instrument. Both females and males have been presented dancing to drum tunes played by males. The Science textbook for grade two, however, has given a favorable treatment on the use of musical instruments by girls (p.49 & 50). More girls than boys are illustrated playing music using a flute.

Apart from the fact that there is no gender power balance in leadership positions, data in Table 5.34 do not depict the reality in the different settings in Tanzania. There are female cabinet ministers, head teachers/headmistresses, head girls/prefects, and professors in political as well as educational settings. This is supported by the introduction by the Tanzania government of gender affirmative action to increase the proportion of women in leadership positions, including those in the Legislature and local government councilors (Keller et al 1999). For role modeling purposes for girls, writers of textbooks including English textbooks should have depicted such female leaders. This does not deny the fact that there is gender power imbalance between males and females that prevails in the Tanzanian society.

There are several reasons that contribute to having few females in leadership positions. Some of the factors, which have been outlined by Keller et al (1999) and Mukangara and Koda (1997) include:

- Women having too heavy work burdens and responsibilities to fully participate in leadership positions;
- Majority of women having little or no education;
- Women lacking financial support for campaigning during elections; and
- Socialization process where women have been socialized to be submissive, nurturing, non-argumentative, compromising and putting themselves second to other members, hence denying themselves the power to engage in real politics (Brown et al 1996).

5.6.9 Depiction of personality characteristics

Personality traits that are pegged to textbook characters can be stereotyped as they can be pegged and associated with females and males only. The portrayed personality traits can have positive or negative effects on readers. To find out if personality traits are stereotyped,

positively or negatively to male and female textbook characters, Table 5.36 shows the identified personality traits found in English textbooks that have been content analyzed.

Table 5.36 Depiction of personality traits by gender

Types of personality traits	Frequency of depiction		Types of personality traits	Frequency of depiction	
	M	F		M	F
A. Positive personality traits			Curious	1	-
			Excellent soccer player	1	-
Polite	2	4	Famous	1	-
Benevolent	-	2	Fluent in English	-	1
Helpful	1	1	A good nurse	-	1
Good dancer	1	-			
Happy farmers	1	1	B. Negative personality traits	1	-
Friendly shopkeeper	1	-	Aggressive (physical)	2	-
Good at mathematics	3	-	Liar/unreliable/untrustworthy	1	-
Hardworking	1	2	Cruel/unkind	1	-
Clever/intelligent	2	3	Greedy	1	-
Smart			Stupid	2	-
Daring/courageous	2	-	Shameful	1	-
Rich	1	-	Lazy	1	-
Careful	1	-	Impatient	1	-
A good writer	1	-	Mean/selfish	1	-
Kind	-	1	Shy/quiet	1	-
Cheerful	-	1	Unhappy	1	-
Patient	1	2	Untrustworthy	1	-
Dutiful	1	-	Sick	-	1
Funny	1	-	Naughty	-	1
Friendly/social	-	1	Angry	2	-
Beautiful	-	1	Thievish	2	1
Studious	-	1	Poor	-	1
Neat	-	1	Cowardly	-	2
Strict	-	1			

Data in Table 5.36 have conveniently been grouped into positive and negative personality traits. The demarcation between positive and negative characters has to be taken with caution. By and large, these personality traits can be considered positive in one incidence, but negative in another. For example, a parent could be strict with her daughter on behavioral matters where the strictness could lead to a child becoming a good successful student as has been the case with ‘Chiku the naughty girl’, narrated in Book 6 (Unit 8). A parent could unduly be strict to the point of abusing the child’s rights. As much as possible in this case the pegging and determination of positive and negative personality traits have been based on the context under which the illustrations and narration in the textbooks have been presented.

Data in Table 5.36 also show that there has been a certain balance in the depiction of positive personality traits to both boys and girls although boys hold the upper hand. 18 positive personality traits have been pegged to boys compared to 17 for girls. For negative traits the balance has not been maintained. Boys have been associated with 14 personality characteristics compared to six of the girls. The explanation for boys being pegged to more positive and negative traits can be attributed to various reasons. One of the reasons could be the fact that there are more illustrated, named and unnamed male characters compared to females ones. An obvious logic would be for more personality traits being pegged to males who have a higher frequency rate of appearance. In some instances, however, this has not been the case especially when more female characters have been depicted. Another reason for this situation could be that there are personality traits that are more associated with males only, according to the author’s perception. The socialization process in most cases is gender stereotyped. As has already been noted in most cases, the negative personality traits have been depicted to males (in this case 14 negative ones).

As has already been stated, what can be considered a negative personality trait in one incidence may be positive in another. A person with a given personality trait can use it to his or her advantage. The socialization process that include the development of personality traits greatly influence the level of self-confidence and risk taking. These are pertinent prerequisites in involving oneself in business activities. For example, the depicted positive personality traits such as being *dutiful*, *daring*, *courageous* and *aggressive* (fighting or physical aggression) can be an asset to entrepreneurship in Tanzania where the informal sector as compared to formal sector of employment, is becoming more prominent in the

Tanzania economy (Mukangara and Koda 1995). Such personality traits which have been portrayed to males only are found in Appendix F.

Entrepreneurship is a characteristic shared by more men than women due to both cultural traditions and political decisions (Creighton and Omari, 1995). To be a good entrepreneur especially in the informal sector one has to be *aggressive, innovative, daring and ready to accept challenge*. Creighton and Omari (1995:148) have argued that the socialization process at both household and community levels (including the school) puts women in non-enterprising position, where they are nurtured to be *non-argumentative, non-aggressive, quick to accept defeat and subordinate*. The type of socialization process where women are socialized to control their aggression, to exercise self-control, to be passive and to please others, puts most women at a disadvantageous position in the arena of political and economic competition. The feminine personality traits possessed by women are however crucial in building a society that is peaceful and people would want to develop in a harmonious way. The possession of such personality traits is also important to males especially those who hold leadership positions in the community and the society at large.

5.6.10 Portrayal of language use from a gender perspective

In the analysis of gender in English textbooks, the use of generics, nouns and pronouns has been looked into to determine if the language is gender biased or not. In the presentation, such generic terms that have been discussed include the use of *'he'* *'man'* *'mankind'* *'businessmen'* and *'businesswoman'*. The depiction becomes biased *whenever* the picked generic uses a masculine or feminine term as the proper form to represent both females and males (Masinjili and Kabira 1997). Pronouns can be classified into masculine (*he* and *his*) feminine (*she* and *hers*) and neutral (*it, they, he* or *she*). A language can be gender biased if there is a one-sided use of a noun or pronoun, for example, personal pronoun *"he"* or *"she"* referring to all human beings. Such depiction produces the impression that women or men are ignored or passed over in a given situation (Mosley, n.d). Research findings indicate that in most cases, it is the women who are ignored in textbooks by the use of generics. It is easier to use gender-neutral pronouns in Kiswahili than it is in English (Obura 1991).

The findings in English textbooks that have been content analyzed show that in most incidences, writers have used gender generics that are gender biased while in few places writers have been gender neutral. The following examples show how authors have been

gender-biased in the use of language through generics. Also shown are examples where writers have used neutral language by avoiding the use of gender-biased language. In English Pupil's Book Seven, unit seven, for example both gender-biased and gender-neutral language has been used. The uses of generics, which are masculine to represent both males and females, have been depicted. Such generic terms include "**men**" "**man**", **mankind**". These generic terms can be found in the following sentences on *Science and Technology*, Unit Seven in Pupil's Book Seven:

- Although **man's** first attempts to understand the world were not very much organized, they did eventually lead to the development of modern science (p. 49); and
- **Man** has always tried to make *his* work easier by using tools for farming and for hunting. *He* has also made tools and weapons for fighting. The first **men** made tools and weapons out of stone of sharp rock. As *man* learned more about the world, **he** made better equipment from metal and other materials.

In the above description masculine generic terms of "**man's**", "**man**" "**men**", "**he**" and "**his**" are meant to depict both males and females in connection with the development of Science and Technology. This might not be the case in communicating the intended message. With such use of masculine generic terms on the discovery of Science and Technology, it is more likely that young readers would associate science and technology with males. Such impression is reinforced by another factor in the text where there is an illustration of two men in traditional attire involved in a scientific activity of observing stars. These are probably astrologers at work depicting "**Man** learned more about the world".

Another masculine generic term that has been used to encompass both males and females is "**mankind**". The text is also found in the Unit on *Science and Technology*. The narration creates the impression to readers that science should be the domain of males only, a situation that appears in educational institutions in Tanzania and in the world of employment (Keller et al 1999 and Mukangara and Koda 1997). The text from the English textbook reads thus:

"Aeroplanes, cars, computers, televisions... are all a result of developments in science and technology. Do you think that these have helped or harmed mankind?" (Book Seven, p. 57).

The other masculine generic terms that are found in English textbooks are *'fisherman'* and *'businessman'*. In some instances, however, writers have used gender-neutral equivalents. For example, writers have avoided the use of the generic term *businessman* to include both males and females. Writers have been specific that there are businesswomen or businessmen. On page 72 (Book Seven) it is stated, "...*But if I am not selected I will become a businesswoman*". The writers contrast this on page 74 where the term *businessmen* is written in this way: "... *I'll buy goods from big businessmen or farmers at a lower price and sell them at a higher price.*" The only problem with such depiction is on the status between male and female characters in business transactions. The depicted girl is only aspiring to be a businesswoman, who will buy goods from prominent *businessmen*. Such portrayal influences the readers' perception of the superiority of males over females in business transactions of prominent businessman compared to aspiring 'girl' businesswoman.

The writers have also used non-gender-biased language, which is neutral, when describing some of the activities carried out by a librarian (Book Seven p. 19) as follows:

"A librarian is a person who takes care of a library. He or she knows a lot about the library and can show you where to find a book or magazine".

The problem is with the illustration that represents the librarian. The illustrated librarian is a male. The reader might be attracted to the illustrated male librarian and forget all about the depicted *he or she* neutral pronouns in the text. The reader can conclude from the illustration that the librarian should be a male. This defeats efforts of writers in trying to be gender-neutral in the writing of the text. The hidden message through the illustration could override the intention of the author in being gender sensitive in her or his writing.

5.7 Findings in Kiswahili Textbooks

5.7.1 Introduction

In this section where the presentation and discussion of the findings in Kiswahili textbooks have been made, the following things have been described:

- The list of Kiswahili textbooks that have been content analyzed;
- The categories that have been used in the content analysis task;
- Presentation and discussion of the findings based on the identified categories; and

- A summary of the findings on the portrayed gender roles in Kiswahili textbooks.

The Kiswahili subject has the biggest number of pupils' textbooks compared with other subjects taught in primary schools. This is attributed to the fact that there are two readers for each class (grade one and two). The total number of textbooks in the two grades is therefore four. In each of grades three to seven there is one textbook for each grade. The following is a list of Kiswahili textbooks, which have been content analyzed:

- i. Taasisi ya Elimu Tanzania. 2000. *Kusoma: Kitabu cha Kwanza* (5th edition). Dar es Salaam: Tanzania publishing house (for grade 1);
- ii. Taasisi ya Elimu Tanzania. 2000. *Kusoma: Kitabu cha Pili* (5th edition). Dar es Salaam Tanzania Publishing House (for grade 1);
- iii. Taasisi ya Elimu Tanzania. 2000. *Kusoma: Kitabu cha Tatu* (5th edition). Dar es Salaam: Tanzania Publishing House (for grade 2);
- iv. Taasisi ya Elimu Tanzania. 2000. *Kusoma: Kitabu cha Nne* (4th edition). Dar es Salaam: Tanzania Publishing House (for grade 2);
- v. Taasisi ya Elimu Tanzania. 1995. *Kiswahili: Darasa la Tatu: Kitabu cha mwanafunzi* Dar es Salaam: Oxford Educational Books Tanzania Ltd. (for grade 3);
- vi. Taasisi ya Elimu Tanzania. 1995. *Kiswahili: Darasa la Nne: Kitabu cha mwanafunzi* Dar es Salaam: Oxford Educational books Tanzania Ltd. (For grade 4);
- vii. Taasisi ya Elimu Tanzania. 2001. *Kiswahili: Darasa la Tano: Kitabu cha mwanafunzi.* (4th edition) Dar es Salaam: Ben and Company Ltd. (for grade 5);
- viii. Taasisi ya Elimu Tanzania. 1996. *Kiswahili: Darasa la Sita: Kitabu cha mwanafunzi* Dar es Salaam: Ben and Company Ltd. (for grade 6); and
- ix. Taasisi ya Elimu Tanzania: 1996. *Kiswahili: Darasa la Saba: Kitabu cha mwanafunzi* Dar es Salaam: Ben and Company Ltd. (for grade7).

In order to determine the portrayal of gender roles between male and female characters in Kiswahili textbooks, the following categories have been used in the content analysis exercise:

- Frequency of appearance of characters in terms of illustrations, named and unnamed characters;
- Depiction of employment;
- Depiction of productive and reproductive activities;
- Portrayal of characters in association with use of technology;

- Portrayal of the pegging of personality traits to characters;
- Use of language;
- Link of characters to leisure and sports activities;
- Portrayal of ownership of goods and assets; and
- Depiction of leadership positions.

5.7.2 Depiction of frequency of appearance of characters

The depiction of frequency of appearance of male and female characters in Kiswahili textbooks has been determined using illustrated, named and unnamed characters. The extent to which male and female characters are made visible in these textbooks is shown in Tables 5.37, 5.38 and 5.39, which are clustered into illustrated, named and unnamed groups respectively.

Table 5.37 Frequency of appearance of characters in illustrations

		Frequency of illustration in textbook for:										Total	%
		Gr. 1		Gr. 2		Gr. 3	Gr. 4	Gr. 5	Gr. 6	Gr. 7			
		Kusoma		Kusoma									
		1	2	3	4								
Type of character	M	58	22	59	30	119	125	77	110	37	637	66.6	
	F	45	9	31	15	59	61	43	38	19	320	33.4	
	Total	103	31	90	45	178	186	120	148	56	957	100	

Table 5.38 Frequency of named characters

		Frequency of illustration in textbook for:										Total	%
		Gr. 1		Gr. 2		Gr.3	Gr. 4	Gr. 5	Gr. 6	Gr. 7			
		Kusoma		Kusoma									
		1	2	3	4								
Type of character	M	14	9	18	9	46	52	42	51	37	278	69.8	
	F	3	6	6	7	17	26	19	22	14	120	30.2	
	Total	17	15	24	16	63	78	61	73	51	318	100	

Table 5.39 Frequency of unnamed characters

		Frequency of illustration in textbook for:									Total	%
		Gr. 1		Gr. 2		Gr. 3	Gr. 4	Gr. 5	Gr. 6	Gr. 7		
		Kusoma		Kusoma								
		1	2	3	4							
Type of character	M	11	14	12	17	16	24	9	16	11	130	51.4
	F	17	12	17	12	12	12	6	19	16	123	48.6
	Total	28	26	29	29	28	36	15	35	27	253	100.0

Data in Tables 5.37, 5.38 and 5.39 where the frequency of appearance of characters is shown indicate that overall, males dominate in each of the three clusters. In the illustrations, for example, for every 100 female characters depicted the number of male characters is 199. In named characters the female to male ratio is about 100 to 233 illustrations. The ratio of females to males of the unnamed characters is smaller and is about 100 to 106.

There is no single grade Kiswahili textbook where the number of female characters surpasses that of males in both illustrated and named characters. With unnamed characters, there are four textbooks which have more unnamed female characters compared with male characters. The other five textbooks have more male unnamed characters. The calculated frequency of unnamed characters which are sex related terms include; *baba* (father), *mama* (mother), *dada* (sister), *kaka* (brother), *shangazi* (aunt) *mjomba* (uncle), *msichana* (girl), *mvulana* (boy),

mwanaume (man), *bwana* (Mr., Sir, husband), *bibi* (wife of, madam, grandmother), *babu* (grandfather).

Such unnamed characters have also been identified in English textbooks. The only difference has been that the English language has a third person singular gender marker of *her and him*. As already noted, the use of generic '*he*' increases the number of unnamed male characters in English textbooks. Nandwa (1987) cited by Obura (1991:64) has noted this phenomenon. This is not the case with the Kiswahili language. Kiswahili, like other African languages especially Bantu languages has the advantage of having no third person singular gender marker. There is therefore, an intrinsic advantage of the Kiswahili language as regards the third person singular pronoun. Nandwa cited the Kiswahili pronoun 'yeye' (s/he), the third person singular, prefix *a-*, functions as a singular animate marker, but not marker as the case with other languages like English and French. This being the case, with pronouns in Kiswahili one would have expected a balanced frequency of appearance between male and female characters. This has not been the case, as the neutral pronoun "yeye" would later be identified to be a male or female with the use of such devices as illustrations and names. Data in Tables 5.36 and 5.37 indicate dominance of males in frequency of appearance.

It should be noted that illustrations are intended to assist the reader to understand the narration within the text rather than stand out on their own. There are incidences however, where what is illustrated and what is discussed in the text do not match. The already noted incidence is in English textbook for Grade six (p.25) where a schoolgirl named Amina is reported in the story to be sick and was hospitalized. The text (p. 25) however, does not match with the picture illustration with patients in the hospital ward (p.26) as there are three males patients who are shown in the hospital ward. Such mismatch has also occurred in the Kiswahili textbook for grade seven (p. 17). On this page, a female magistrate has been illustrated presiding over a case in a court. In the text, it is narrated that the magistrate is a male (*bwana hakim* (p. 19). The author and the illustrator might have done this unconsciously as the word 'bwana' has had its colonial historical legacy to be considered as a generic term. This has had an impact on translation of Swahili to English as discussed below.

The word '*bwana*' as a prefix has given rise to such compound words like '*Bwana Shamba*' (Agricultural Officer), '*Bwana Mifugo*' (Veterinary Officer), '*Bwana Hakim*' (Magistrate), '*Bwana Afya*' (Health Officer), '*Bwana Misitu*' (Forest Ranger), '*Bwana Mganga*' (Medical

Officer). These are words that have been depicted in the Kiswahili textbooks. '*Bwana*' has several meanings including, Mr., Sir, Lord (TUKI 2001:35). Another meaning is 'showing respect of a person' (TUKI 2001:35). Such show of respect can be traced back to the colonial times, where the majority of colonial civil servants in different sectors were males. These colonial civil servants wanted to be respected by colonized people and demanded to be called *Bwana* (Sir) before an occupational title hence the word '*bwana*'. *Bwana* had to come first before the title of the officer who was being addressed.

The problem now arises when the officer in question is a female. It becomes awkward to call her, for instance, '*Bwana Shamba*' (Agricultural Officer), as it is unbecoming for example to address a woman chairing a meeting "Chairman". In the same textbooks, there have, however, been efforts to avoid the use of '*bwana*' as a generic term. Alternative words have been used to depict the actual situation. Gender-neutral words are used to label the personnel in the different fields. Examples of such neutral titles are '*Mtaalamu wa Kilimo*' (Agricultural Expert) or '*Afisa Kilimo*' (Agricultural Officer). When specification of the sex of the female officer is needed the use of the prefix '*bibi*' is used, such as '*Bibi Elimu*' (education officer) as seen in Kiswahili textbooks for grade three (p.97).

5.7.3 Portrayal of reproductive and productive activities

In order to underscore the presentation of reproductive and productive roles of male and female characters in Kiswahili textbooks, the activities have been categorized into four sub-categories. These are activities that relate to food preparation and home maintenance, child rearing, agricultural and animal husbandry, and arts and crafts. Table 5.40 shows the pegging of these activities by gender and the frequency of appearance.

Table 5.40 Pegging of reproductive and productive roles by gender

A: Food preparation and home maintenance related activities					
Types of activity	Frequency		Types of activity	Frequency	
	F	M		F	M
Fetching water	4	6	Buying food items	1	-
Collecting firewood	1	1	Preparing meat for festival	-	1
Splitting wood for fuel	-	3	Serving food in a festival	-	2
Cooking	21	1	Washing clothes	2	1
Table preparation	1	-	Cleaning compound	-	1
Cleaning the kitchen	4	-	Doing domestic chores	1	-
B. Child rearing related activities					
Suckling/feeding a baby	2	-	Performing First Aid	1	-
Attending to a hospitalized patient	1	-	Dispensing medicine to a grandchild	1	-
Monitoring son's school progress	-	1	Socializing children through story telling	3	3
Escorting a son to school	-	1			
C: Agricultural and animal related activities					
Types of activity	Frequency		Types of activity	Frequency	
	F	M		F	M
Poultry farming	3	3	Herding livestock	-	6
Gardening	2	4	Milking cows	1	1
Farming	3	9	Making ghee and cheese	1	1
Planting seedlings	3	3			
D: Crafts and arts related skills					
Brick laying	-	1	Mending clothes	1	-
Pottery work	3	-	Charcoal making	-	3

Data in Table 5.40 indicate several trends as far as the pegging of reproductive and productive roles to female and male characters is concerned. The first trend is that in three

out of the four sub- categories, female characters dominate in the frequency of appearance. In the first sub-category of food preparation and home maintenance activities, the number of depicted females is 36 compared to 16 for that of males. The number of female characters in child rearing activities is 8 compared to 5 of the males. In the fourth sub-category of arts and craft related activities, females have been dominant as there are 9 females compared to three males. The only sub-category where males are dominant in terms of frequency of depiction of characters is the one with agricultural and animal husbandry related activities. The number of males depicted in terms of frequency has been 27 compared with 13 females. One of the reasons that may explain such depiction is related to gender stereotyping and gender bias by authors in writing textbooks.

In the first category of food preparation and home maintenance activities, such tasks as cooking and kitchen cleaning are traditionally considered female activities. Unfortunately these activities are taken for granted and not valued as important (Keller et al 1999: 16). These different reproductive activities carried out by females provide the bases under which activities by other members of the family are carried out. Activities that are occasionally carried out by males are not as demanding as domestic chores. Males occasionally do such depicted activities as preparing meat for a festival and serving cooked food for festival purposes. These activities are, however, more prestigious than such routine activities as cooking and washing dishes performed by females in the day-to-day tasks carried out in a home.

In the depiction of child-rearing activities such as suckling and feeding babies, caring for children, the sick and elderly have been female dominated. Looking at the actual situation in Tanzania, one notices that it is the women who are much affected when children go hungry or when members of the household are sick (Keller et al 1999). Women take responsibilities for the home, care for sick family members and look after the elderly.

The pegging of *arts and crafts* related activities in the third sub-category was gender stereotyped as brick making and charcoal making are conventional male activities compared to activities such as mat and pottery making, and mending of clothes. These are traditional female activities and have been stereotyped in other presentations. Activities under the domain of arts and crafts have been stereotyped into masculine and feminine tasks.

The category of females and males pegged to agricultural and animal husbandry activities was gender stereotyped and in some instances biased. What was depicted is what prevails in the Tanzanian society. While poultry farming, gardening and general farming have been depicted to both males and females, the pegging of more males than females in these activities should not be so when compared to the prevailing situation. As has already been noted in English textbooks, there are more women than men involved in agricultural activities (Keller et al 1999).

Looking at the depicted activities in terms of the location where the activities are carried out, the following can be discerned. Whereas activities portrayed to females are home bound, most activities pegged to males are done away from the home. Activities that are done at home are routine work, which in most cases are not remunerated and recognized in the national accounts. For example, while both males and females are depicted in farming activities, it is only a male who has been involved in cash crop farming (Kiswahili for grade two-Kusoma Four, p. 12).

When one focuses on livestock herding, for example, the depicted male dominance in such activities has to be related to ownership of livestock and also personality characteristics that are associated with herding. Activities that are associated with being strong and activities that are dangerous such as herding cattle and splitting wood have been pegged to males only. The development of personality traits such as being courageous to face dangerous situations and also not being frightened to face challenging situations puts males in a better position to carry out activities in dangerous situations.

The depiction of reproductive and productive roles is however, gender biased, as females also involve themselves in activities that demand the use of strength. Such activities performed by women demand frequent carrying of farm produce, firewood and such other heavy loads. There is need for textbook writers to balance the portrayal of reproductive and productive roles between male and female characters in order to eliminate gender-stereotyped attitudes of having a rigid gender division of labour in performing activities.

5.7.4 Depicted occupations to characters

The pattern of the findings in the pegging of employment that has been noted in other textbooks that have been content analyzed in the other five subjects has also been repeated in the pegging of occupations in Kiswahili textbooks. In order to understand the said pattern of distribution of employment patterns, data in Table 5.41 consist of an obliged list of male and female job allocation. The groupings have been done in three clusters of pegged employment for males only, females only and for both females and males.

Table 5.41 Depiction of occupations of male and female characters

A. Work employment portrayed to males only			
Type of employment	Frequency	Type of employment	Frequency
Health officer	3	Ten cell leader	1
Laboratory technician	1	Masonry	2
Traditional healer	1	Carpentry	4
Dentist	1	Laundry man	1
King	7	Charcoal maker	2
Chief	4	Brick layer	2
Chairperson of a committee	1	Shoe maker	2
Barber	1	Fishery	5
Tailor	2	Keeper of birds/ducks	2
Engineer	1	Bee (hive) keeper	2
Locomotive inventor	1	Policeman	5
Poet/writers	5	Soldier (defence forces)	1
Archaeologist	1	Security guard	2
Pilot	2	Shopkeeper	2
Driver	2	Businessperson	1
Cattle herder	2	Messenger	1

Agricultural officer		5	Veterinary officer	1	
Forest ranger		2			
B. Work employment pegged to females only	Frequency	C. Occupations pegged to both females and males	Frequency		
	Type of employment		Females	Males	Females
Matron	1	Gardener	3	3	
Nurse	4	Teacher	10	10	
Bank cashier	1	Doctor	4	3	
Queen	2	Farmer	9	3	
Pot maker	3	Vendor	4	2	
Mat maker	2	Poultry keeper	5	2	
Aspiring mechanic	1	Musicians	1	1	
Aspiring pilot	1				

Data in Table 5.41 depict different patterns in the allocation of occupations. The first pattern that can be identified is that male characters have been well represented in a wider variety of jobs. Out of the 50 identified employment fields males only, have featured in 42 fields while females have been associated with 15. It should be noted that as there are shared pegging of occupations the total number comes to 57. The female to male ratio in relation to occupations is 10 to 33.

Another pattern related to the depiction of characters to employment fields has been the frequency of appearance of the characters in the identified fields. Out of the identified 50 employment fields in the textbooks, a total of 114 characters with jobs have been shown but only 39 (25.5%) of these are women. This percentage is slightly higher than what prevails in Tanzania as far as the percentage of employment of males and females in the formal

employment sector is concerned. Mukangara and Koda (1997:26) have revealed that only 20% of women are in paid employment within the formal sector. In the informal sector men are still dominant as only 15% of the economically active women are employed in this sector.

Besides women being portrayed in a narrower and limited range of occupations, there is another pattern that can also be discerned from Table 5.40. This has been the pegging of jobs in accordance with traditional gender stereotyped patterns. Jobs such as nurse, matron, cashier (not accountant), pot and mat making have been allocated to females only. These are gender stereotyped and are traditionally considered female occupations. This can be contrasted to employments pegged to males, which have also been gender-stereotyped. Trades such as masonry, carpentry, brick laying, and shoe making that have been depicted to males only are traditionally considered male stereotyped jobs. Engineering, piloting airplanes, soldiers, and fishing activities have traditionally been the domains of men and writers of Kiswahili textbooks are depicting the status quo. Male characters are also dominant in occupations that are pegged to both females and males. Men like women have been given prominence in such fields as farming and poultry keeping, which ordinarily are occupational fields that are dominated by females in Tanzania (Keller et al 1999:39).

As already noted in the discussion of the findings in other textbooks in other subjects, there are various reasons that have been attributed to the identified pegging patterns of occupations. Such reasons include writers not being gender sensitive to balance their depiction hence hindering both girls and boys to aspire for different careers. The pegging of employment by maintaining the status quo has negative impact on the readers. Such pegging does not open avenues to all learners for employment that is not based on rigid gender patterns. Such gender stereotyping does not address and challenge gender imbalance that prevails in the allocation of jobs in the society, a society that aspires for gender equality in the social and development arena.

The pegging of occupations to girls and boys in textbooks, which directly relate to what prevails in the society puts females at a disadvantage. The socialization which girls and boys receive contributes to gendered labor force patterns especially women's lower labor force

participation and being overrepresented in low status of job hierarchy and in lowly paying jobs when compared to men.

5.7.5 Presentation of property ownership

As noted elsewhere in this study, ownership of goods and assets is one of the indications of financial status an individual possesses in the community. This is especially true when the person owns valuable property. Property ownership is one of the bases of power. The depiction of property ownership by males and females in Kiswahili textbooks is summarized in Table 5.42 and data have been grouped into three clusters of property, namely, owned by males only, property owned by females only and property owned by both males and females.

Table 5.42 Frequency and types of items and goods owned by males and females

A: Property owned by males only			
Type of property	Frequency	Type of property	Frequency
Poultry farm (chicken ducks and birds)	5	Chain	1
Farm	2	Shops	3
House	3	Beehives	1
Fishing gear (boat, nets and pressure lamp)	2	Miracle ring	1
Goats	2	Mango tree	1
Cattle	4	Tractor	1
Cat	1	Wooden hoe handles	1
Fierce dog	1	Furniture workshop	3
Money	7		
B: Property owned by females only			
Baby	2	Pots	1
Mat	1	Bunch of bananas	1
Gourd	1	Watch, pouch and handkerchief	1
C: Property owned by both males and females			
	Frequency		
	M	F	
Sheep	2	1	
Garden	2	1	
Trolley	2	1	

Several interpretations can be made as regards the depicted data in Table 5.42 on the pegging of property ownership to males and females. One interpretation, which concurs with the findings in other textbooks, which have been content analyzed in this study is that males own a greater range of property than females. Whereas males have been shown to own 20 types of goods and items, females have been depicted as owners of only 10 types of property. Another interpretation is that besides males owning of a variety of properties, the frequency of the depicted ownership by males is greater than that by females. For example, 46 males compared to 10 females were associated with ownership of the different types of items and goods. With regard to the pegging of females to property ownership, the total frequency of appearance has been ten. Even in items that have been depicted to both males and females, the ratio between females and males is one to two in favor of males.

Males have also been pegged to own more valuable property than females. Assets such as farms, horses, fishing gear, cattle, goats, furniture workshop, a mango tree, beehives and money are the kind of property that generate wealth. This is not the case with items such as pots, mats, and gourds that have been depicted as being owned by females. The items which are shown to be owned by females are homebound and used in carrying out domestic activities which are traditionally considered feminine. They are also consumables and perishables. Examples are food items such as bananas.

The situation already noted where more valuable property has been associated with males, corresponds with the traditional thinking and prevailing situation that men are the rightful owners of wealth at household and community levels even if females have a share in the acquisition of such property. Mukangara and Koda (1999:46) have noted that in Tanzania ownership of property is clearly gender-based. Goods and assets which are of high value and which generate high social status are allocated to men and those with lower status are allocated to women.

The portrayed trend of ownership in Kiswahili textbooks, like in the other textbooks used in primary schools is a replica of what prevails in different communities in Tanzania. One of the underlying reasons, as has already been pointed out, is the inheritance pattern that exists in most communities in Tanzania. Women and daughters do not inherit property and real estates such as land, houses and animals. For example, passing land to daughters, who will

eventually get married and become part of another family or clan, is strongly opposed in many communities in Tanzania.

It should be noted however, that the situation that has been depicted and based on traditional thinking is not static and is ever changing with time. Women are acquiring and owning valuable property such as houses, land and vehicles. Writers should exploit this changing trend to depict ownership of valuable property by women like those depicted to be owned by males. Such a portrayal would create role models for girls on which to base their aspirations as owners of property.

5.7.6 Depiction of characters in association with technology

The findings on the pattern on the depiction of male and female characters in association with the use of technology does not divert from what has been noted in the other textbooks of the five subjects that have been content analyzed. More males than females have significantly been portrayed in association with technology as data in Table 5.43 indicates.

Table 5.43 Depiction of characters in association with technology

Type of technology	Frequency	
	M	F
Driving a lorry/car/tractor	3	-
Using a crane to load and off-load loads	1	-
Navigating a ship	1	-
Inventor of locomotive	1	-
Working in a factory	1	-
Making fire using sticks	2	-
Traveling by bus	5	1
Riding a bicycle	1	-
Making a kite	2	-
Playing with a car toy	2	-
Using a microscope	1	-
Making furniture	1	-
Sailing a boat	1	-
Designing, constructing and using a trolley	1	1

Data in Table 5.43 show that the majority of characters associated with technology in Kiswahili textbooks are males. There are only two females compared to 23 male characters who have been depicted in relation to technology. While males have been associated with 14 types of technology, females have been shown only in two: traveling by bus and the design, construction and use of trolley to fetch water. Even where a female has been depicted traveling by bus, the equivalent is five males. In traveling by bus, which is a common practice to both males and females, a female has been depicted only once. In one incidence of the use of technology, a girl and a boy have been stereotyped in carrying the same activity of fetching water (Kusoma One, for grade one, p.25). The boy is portrayed fetching water using a trolley, but the girl is depicted fetching water on her head using a bucket. As noted in the Social Studies textbooks, males would be willing to carry out activities considered ‘woman’s work’ if modern technology were available to make the task easier. It is thus suggested in some quarters that it is important to introduce technology in carrying out 'feminine' activities that will attract males to participate (Keller et al 1999).

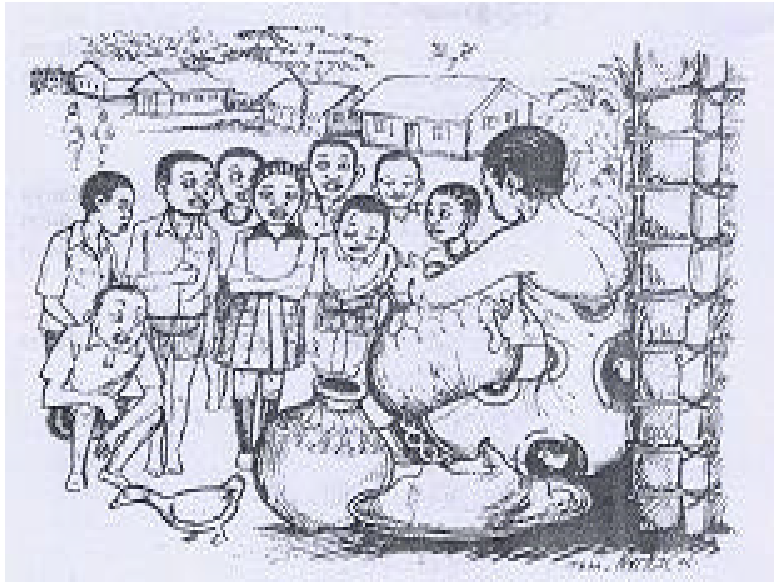
In most cases authors of the textbooks that have been content analyzed have reinforced the status quo that in crafts such as pottery men would be depicted using machines when making pots (Vocational Skills textbook for grade seven p.11). Women on the other hand have been depicted making pots in the traditional way (Kusoma: 4, p. 37 and Kiswahili textbook for grade 5 p.55). Examples of illustrations to depict the said situations are found in figures 5.20 and 5.21.

Figure 5.20: A man demonstrating pot making using a machine



Source: *Stadi za Kazi 7* (p.11). The man is depicted demonstrating skills in moulding a pot using modern machine in teaching Vocational Skills. This can be contrasted with the illustration in figure 5.21 where a woman shows school girls and boys how to make pots in the traditional way.

Figure 5.21: A woman shows school children the traditional art of making pots



Source: *Kiswahili: Kitabu cha Mwanafunzi* (p.55). An educational visit to an elderly woman by class five pupils who wanted to know from her how pots are made in a traditional manner.

Authors of Kiswahili textbook for grade seven (p.10-14) have been gender sensitive in presenting the activity of fetching water with use of some technology. Both the boy and the girl have been portrayed as active participants in all stages of designing, constructing and using the trolley in fetching water. The idea of making a trolley for fetching water by the boy and girl came about on realizing that they were often late to school. The education of the girl and the boy is taken seriously as the writer wants the two children to get early to school. This can be contrasted with the story of the family of Mponda in the Social Studies grade three textbook where the implication is that the daughter is not given due prominence in education (See Section 5.4.8).

5.7.7 Portrayal of characters in leisure and sports activities

In the narration of Kiswahili textbooks, leisure and sports activities have included swimming, watching a magician/conjurer at work, story telling, flying kites, skipping a rope and playing with toys. Data in Table 5.44 show how males and females in illustrations and in the text have been pegged to these leisure and sports activities.

Table 5.44 Pegging of characters to sports and leisure activities

Type of leisure and sports activity	Frequency of depiction	
	M	F
Playing soccer	60	-
Playing netball	-	8
Skipping a rope	1	2
Swimming	2	-
Playing with a car toy	2	-
Running short distances	11	3
Sack racing	-	4
Telling stories	5	5
Watching a magician at work	4	1
Playing with a kite	2	-
Traditional dances	7	5
Total	94	28

Data in Table 5.44 indicate that participation in leisure and sports activities has been unequally distributed between male and female characters. Male characters have been depicted to have more leisure time than female characters. As already noted elsewhere in this study, female characters are depicted showing what prevails in the society. The time women and girls spend on domestic work limits their ability to engage in leisure activities.

What can be noted on the type of participants to these sports and leisure activities is that women were only depicted telling stories to children. The few depicted females in leisure and sports activities have been girls. This is not the case with male characters involved in leisure and sports activities. Apart from the old man telling stories to children (Kiswahili Book Three, p. 4-6, Kiswahili Book Four, p. 9-10 and p. 85-66), men were also depicted jogging with a skipping rope, conjuring and watching a magician's show (*Kusoma* Book Four p. 15). Although the girl was present in the magician's show, she has been depicted as frightened of the performance by the magician as she was depicted closing her eyes to avoid watching the 'frightful' situation. It is obvious that the depicted frightened girl was not a

happy participant in the magician's show. Such depiction is based on gender stereotyping where there is an assumption that girls are timid and afraid of watching such shows.

While this may be true with some females in the society such generalized situations has a negative impact on learners. The depiction would falsely lead to the thinking that this is 'natural' and should be the logical order of things. While reality should be portrayed in some occasions in textbooks, this should be challenged in the teaching and learning encounter. However, this has not been the case with textbooks in all subjects that have been content analyzed, as the content of textbooks is taken to be 'the whole truth and nothing but the truth'. This can be detected by analyzing the set questions at the end of each chapter/unit, which refers to the lower levels of the cognitive domain, in terms of knowledge and comprehension. Teachers' guides, which are meant to help teachers in the teaching and learning processes do not guide students to challenge what has been depicted in textbooks through analyzing and evaluating situations from a gender equality perspective.

Women's lack of involvement in such public activities as sports and leisure is likely to disadvantage them in other developmental endeavors. Such endeavors include those related to politics and careers as noted by Lipman-Blumen (1984) and Basow (1993). According to Lipman-Blumen (1984), for example, husbands having more leisure time than their wives, have greater opportunities to engage in political activity. The involvement in political, community and other activities in the public sphere provide additional opportunities for developing resources and hence acquiring different types of power including that which is related to information. For example, political resources offer possibilities for occupational enhancement, which in turn increase political power. Political power can be manifested in holding leadership positions in the community and society at large.

In order to comprehend the pegging of female and male characters to leadership positions, the following section of the content analysis of Kiswahili textbooks addresses the presentation of characters to leadership positions.

5.7.8 Depiction of leadership positions to characters

The pegging of males to a wider variety of job classifications also filters into more males being portrayed in leadership positions. Males dominate in all leadership positions in educational, political and military spheres. Males have been depicted as dominant in

leadership positions as archaeologists, engineers, and mobilizers. Data in Table 5.45 depicts the frequency of pegged leadership positions of male and female characters in Kiswahili textbooks. Also shown are the kinds of leadership.

Table 5.45 Depiction of characters in leadership positions by gender

Type of leadership in:	Frequency		Type of leadership in:	Frequency	
	M	F		M	F
A: Educational settings			C: Political settings		
Head teacher	1	1	Chiefs	9	
Professor of engineering	1		Kings	13	
Prefect		1	Queen		3
Education officer		1	Chairperson of village committee	1	
Class monitor	1		Leader of migrants	1	
Poets/Writers	5		D: Military settings		
B: Other settings			Lieutenant: Leader of national torch race	1	
Ship captain	1		War leader against colonialists	1	
Chief Medical Officer	1				
Leader of migrants	1				
Renown archaeologist	1				
Locomotive inventor	1				
Mobilizer of farmers at work	1				
Renown musician Leaders	1	1			

Data in Table 5.45 show that apart from males being pegged to a wider range of leadership positions, the frequency of depiction has been higher than that of females. Of the depicted 19 leadership positions, males have been depicted in 17 positions. Females are shown in three leadership positions. When one scrutinizes the frequency of appearance, one notices that the percentage of depicted males in leadership positions is 90.9 compared to 9.1% of females. In

any category of leadership, be it educational, political or military, the males presented are in the majority.

The barriers that have been noted in other textbooks that hinder women from leadership positions also apply in Kiswahili textbooks. There are gender inequalities in participation in public life and political processes between males and females. Males dominate in decision-making positions in the different spheres whether at community or national level. Men occupy the vast majority of positions of power and authority.

It can also be noted that some females have been presented in leadership positions as indicated by findings in Table 5.45. For example, in the educational settings, there are female head-teachers, monitors and prefects. In the political settings, females can also be found as queen, which is an inherited leadership position and in most cases, a ceremonial one. This being the case, writers could exploit this situation by showing more females in a wide variety of leadership positions, although in reality they are fewer. Such depictions in textbooks where few females are shown in leadership positions deprive girls of role models in the political arena. In the Tanzanian Cabinet, for example, the number of women ministers is 4 out of 25 ministers who are men. There are five women deputy ministers compared with 13 deputy ministers who are men.

5.7.9 Depiction of personality traits by gender

In presenting the findings of the depiction of the pegging of personality traits to characters, the following have been indicated:

- The type of personality trait;
- The gender to which the personality traits has been pegged and the frequency in which it has been depicted; and
- If the depicted personality traits have been positive or negative impact depending on the context in which the personality trait is shown in the textbook.

The portrayal of the personality traits is shown in Table 5.46.

Table: 5.46 Depiction of personality traits by gender

A: Positive of personality traits					
Type of personality trait	Frequency of mention		Type of personality trait	Frequency of mention	
	M	F		M	F
Courageous/bold	8	-	Calm	1	-
Clever/intelligent	4	-	Strict	1	-
Wise	3	-			
Strong	8	1	Good behaviour	2	-
Heroic	5	-	Brave	1	-
Famous	9	1	Inquisitive	3	1
Hardworking	4	2	Obedient	-	3
Kind	2	5	Trustworthy	1	-
Showing initiative	-	1	Generous/benevolent	1	1
Enterprising in business	2	-	Self respecting	1	-
Skilled in counselling	-	2	Knowledgeable	2	-
Artful	1	1	Helpful	1	1
Humorous	2	-	Capable leader	1	1
Loving	-	1	Clean	1	1
Adventurous	1	-	Cunning	1	-
B: Negative personality traits					
Type of personality trait	Frequency of mention		Type of personality trait	Frequency of mention	
	M	F		M	F
Timid/cowardly	-	3	Unkind	1	-
Thief	5	-	Liar	1	-
Greedy/selfish	4		Drunkenness	1	-
Quarrelsome	2		Substance abuser	1	-
Lazy	4		Truant	1	-
Sorrowful/sad		5	Naughty	1	-
Concerned with beauty		2	Lust for power	1	-
Emotional/nervous			Superstitions/witch	1	4

Data in Table 5.46 depict several trends as far as the pegging of personality traits to female and male characters is concerned. Some of the trends that can be observed include:

- More males have been associated with both negative and positive personality traits. Out of the 30 identified personality traits, males have been associated with twenty-seven positive characteristics, compared with 14 that have been portrayed to females. Out of the 16 identified negative personality traits males have been described in 12 traits compared with five traits that are pegged to females;
- The percentage of mentioned males in positive and negative personality traits is 73.2 while that of females is 26.8. In comparison to the frequency of illustrated and named characters, more males than females have been depicted both in positive and negative traits. As stated by Nandwa cited by Obura (1991) and also Davies (1995), depicting higher frequency of characters does not necessarily ensure writing gender sensitive textbooks if other aspects have been negatively depicted to one gender in the other categories;
- In most cases ‘feminine’ characteristics have been associated with females and those that are of ‘masculine’ virtues have been pegged to males. Such personality traits associated with femininity include: love, kindness, being sorrowful, timidity, cowardice, concern for beauty and elderly women being associated with witchcraft. Males on the other hand are depicted positively when they are described as courageous, strong, adventurous, brave, willing to take risks, going to the bush to hunt and travelling away from home. However, males have been negatively described as aggressive, unfaithful (thieves), quarrelsome and being involved in fights. In the long run by involving themselves in such situations that involve facing dangerous situations and confronting them, males are thus being conditioned to personality traits that assist them in facing different competitive political and economic situations to their advantage; and
- As already noted in the presentation of the findings in other textbooks that have been content analyzed in this study, the sole pegging of negative traits to males can have a negative impact in the upbringing of boys. This is especially true in the world that upholds hostility, aggression, killings, wars and not caring for other people’s interests and property. Boys could emulate models of being unkind, liars, drunkards, substance abusers, truants and lust for power. Such negative personality traits do not ensure the building of a society that is harmonious where peace and non-violence should prevail. Such traits are detrimental to social and economic development of any society. The negative pegging personality traits and the prevailing situation at societal level are well manifested by the statistics given to the Parliament of Tanzania.

The figures given by the Deputy Minister for Internal Affairs to the Parliament regarding the death penalty in Tanzania, points to the skewed ratio between males and females who have received the death penalty. Of the 370 people who by April 1st 2004 had been sentenced to death, there were 359 males compared to 11 females (The Guardian, Wednesday 14th April, 2004). A discussion with my daughter, who is a form two student who had an excursion (as part of civics class in April 2004) to a remand prison of teenagers less than 18 years of age also pointed in the same direction. As far as adolescence delinquency is concerned, youth commit different types of crimes. Crimes such as robbery, murder and rapes were committed by 46 (92%) boys compared to four girls (8%) among those who were in custody in children's remand prison.

There have been efforts by textbook writers, however, to peg tradition positive personality characteristics to both females to males. Such feminine traits include calmness, obedience, good behavior and trustworthiness. Males should also be portrayed as kind, loving and possessing counseling skills. Females should also be portrayed as brave, intelligent, wise, humorous, strong and courageous. The depiction of such traits, which are considered 'masculine', can assist girls to emulate them in the school and other community settings. The pegging of feminine positive personality traits to boys would also help boys to respect and relate well with girls, and thus build mutual respect.

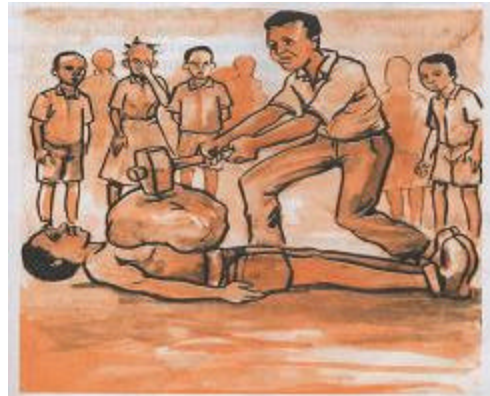
There are personality traits that are solely pegged to females and those that are pegged to males. The presentations show a world of personality traits between the two genders and particularly in the display of emotions in dangerous situations. While females have been depicted as timid, cowardly, sorrowful and showing emotions, males have been presented as courageous, bold, calm, strong, adventurous and brave. The following illustrations from *Kusoma 1* for grade one, p. 9 (figure 5.22) *Kusoma Four* for grade two, p. 15 (Figure 5.23) and *Kiswahili for grade four* p. 56 and p. 79 illustrate the dichotomous depiction of personality traits of females and males. The dichotomous depiction is not only confined to Kiswahili textbooks but also to English textbooks as shown in picture 5,25 in the Primary English Course: Pupil's Book 6 p.51 This is maintaining the status quo regardless of the changing situations.

Figure 5.22: A boy named Chacha rescuing frightened family members from a python



Source: *Kusoma: Kitabu cha Kwanza* (p. 9). What can be noted between males and females in the illustration is frightened females and bold boys. While the girl is frightened, the young boy observes the dead python with confidence.

Figure 23: A magician performing before school children



Source: *Kusoma: Kitabu cha Nne* (p. 15). Note that the girl at the magic show is so frightened that she closes her eyes so as thus not to see the frightening performance.

Figure 24: Men extinguish out fire while women look on with astonishment



Source: *Kiswahili Darasa la Nne: Kitabu cha Mwanafunzi* (p. 56). While males are presented as active in putting away fire, three women are shown frightened, dumbfounded and doing nothing in the fire episode.

Figure 5.25: Mother astonished to see her daughter at an unexpected place



Source: *Primary English Course: Pupil's Book 6 9* (p.51). Chiku's mother is disappointed on seeing her daughter not at school. Chiku, who is a school girl, is playing truancy.

The depiction of males as examples of personality traits such as being courageous, bold, strong and the like have been illustrated in textbooks that have been content analyzed as they appear in Appendix C. It should be noted however, that some authors have also depicted female characters as being courageous, and have shown boldness in situations where some

writers and illustrators could not have depicted females in command and not as background figures. An example of such depictions can be drawn from Kiswahili textbook for grade five (p. 39). Here women have been depicted taking leadership roles in a funeral. Also in Kiswahili textbook for grade six (p. 2) a girl has been depicted rescuing strangers from being robbed by thieves at Manzese, one notorious place in Dar es Salaam city in terms of hooliganism, stealing and robbery. Figure 5.26 depicts the setting as illustrated in the textbook.

Figure 5.26: Courageous girl rescuing strangers from being robbed



Source: *Kiswahili 6: Kitabu cha Mwanafunzi* (p. 2). Thieves intent to steal from strangers but courageous girl helps the strangers. This is a bold action for the girl.

In spite of the positive portray of the girl as illustrated in figure 5.26, elderly women are negatively presented since they have been associated with witchcraft as is discussed in section 5.7.9.1.

5.7.9.1 Elderly women being associated with witchcraft

There are stories in Kiswahili textbooks that can be interpreted associating elderly women with witchcraft. The belief in powers of witchcraft is strong in many parts of Africa (HelpAge International, May 2000). Myths and superstitions about powers of witches have become entrenched over centuries. Research findings in the depiction of these myths and superstitions have been noted elsewhere in West African secondary school textbooks and in Japanese textbooks (Biraimah 1988 and Sugino 1998). Unfortunately, it is the women characters in textbooks that have been associated with witchcraft and superstitions.

The cases relating to witches in West African Secondary School textbooks by Biraimah (1988) and those found by Sugino (1998) in school textbooks in Japan are also found in Kiswahili textbooks. It is through elderly women characters that positive messages have been conveyed with the objective of teaching pupils the importance of having good manners in different life situations. These elderly women have been depicted as mysteriously punishing children who misbehaved. Data in Table 5.47 show some incidences that have been narrated in Kiswahili textbooks where elderly women were meant to help people to behave well and when they misbehaved they were punished using mysterious ways. The narration however on how those who misbehaved were punished can bring up hidden messages that elderly women are associated with witchcraft.

Table 5.47 Portrayed incidences of misbehaviour and accompanying punishments

	Type of misbehaviour	Narrated in	Type of punishment
1	Children not helping an elderly woman carrying a heavy load and laughing at her at the same time.	Kusoma One (p. 32)	Children turned into stones by the old woman.
2	A grandson attempting to steal groundnuts from grandmother's gourd.	Kusoma Two (p. 27)	Grandson beaten by insects from the gourd where he attempted to steal.
3	A truant boy from home who meets an old woman in the wilderness.	Kiswahili Five (p. 8 – 10)	The boy is temporarily turned into a pumpkin and later reappears in his ordinary shape as a human being.
4	A greedy male orange seller in a market, named Bahati refusing to offer an orange to an old woman.	Kiswahili Six (p. 27 – 30)	The old woman punishes the greedy orange seller by growing an orange tree that produces oranges that are eaten by market vendors and customers (including the greedy vendor). After this episode, Bahati finds that all of his oranges have disappeared.

While the intended explicit messages by authors of the narrated incidences in Table 5.47 have been to socialize people to behave well by respecting the elderly, being trustworthy, being generous and not playing truancy, there are other hidden negative messages that can be picked by learners. Such hidden messages can lead elderly women to be linked to witchcraft and superstitions. Witchcraft is believed to cause different misfortunes and calamities in the community. The messages would reinforce the belief in witchcraft, which in most places in Tanzania is linked to elderly women. Researchers and the Police Force in Tanzania have for example, reported that in some regions in Tanzania, including Shinyanga, Tabora and Mwanza, elderly women are killed because of being suspected of practicing witchcraft. It is alleged that old women with red eyes use witchcraft to kill loved ones, inflict curses on others and reduce harvests. It is however, argued by researchers on violence against women that the reasons advanced for the killing of elderly women by associating them with witchcraft are false as there are other basic reasons. The researchers argue that the main reasons are economic ones as discussed below.

Researchers (Ngowi 1999 and HelpAge International 2000) have argued that economic factors may be the main force behind the growing number of killings of the elderly and defenseless women. The economic reasons relate to issues of inheritance of property and human sacrifices associated with bringing about good fortune to those who have made the sacrifices. Killings that relate to inheritance are based on accusations of witchcraft on widowed women with male family members making an effort to inherit possessions of these widowed women. When an old woman is killed, male members of the family and in-laws take the woman's home, fields and other belongings of the deceased. Also, economic reasons relate to mining activities that have risen in relation to the recent boom in mining for gold, diamonds and semi-precious stones in Shinyanga, Tabora and Mwanza regions. It is recorded that some miners, desperate for wealth, would do anything including resorting to human sacrifices to bring fortune in their efforts to get rich through mining. Again, elderly women have become the targets for miners who perform rituals of human sacrifice.

Apart from economic factors, there is the gender division of labor that exists in these communities. Decades of cooking over smoke fires in confined spaces; carrying children, wood and water; laboring in the field and neglect in the final years of their lives are activities believed to affect the health and appearance of these elderly women. Unfortunately, because

of ignorance, the community does not link these factors to ageing but to witchcraft. Such ignorance leads to the killings of elderly women.

5.7.10 Socialization of learners into gendered roles using narratives

Stories have been used in Kiswahili textbooks as a medium of teaching and learning to master different aspects of the Kiswahili language as per curriculum requirements. There are, however, hidden messages that learners are socialized into, on acquiring gender roles. To verify this, summaries of two narratives are briefly discussed. The two examples are found in *Kusoma* 4 for grade two (p. 45-46) and *Kiswahili* seven for grade seven (p. 100-102).

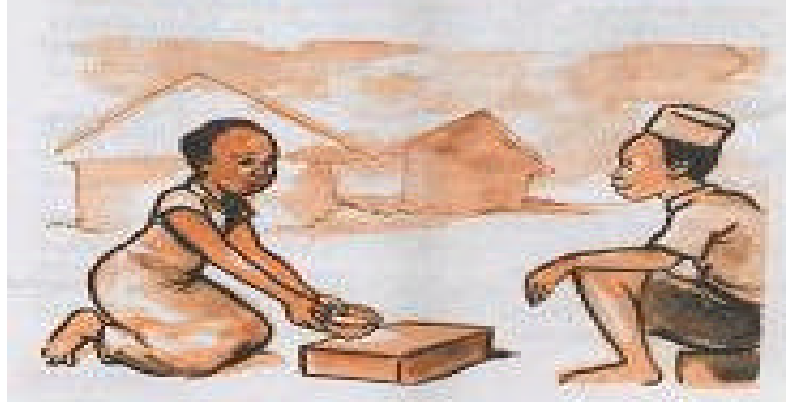
The story in *Kusoma* Book Four concerns children who are role-playing day to day life activities carried out by family members in the home. A clear division of labor related to gender could be discerned in the story. The girls and boys are shown playing roles that are gender stereotyped. The narration of the activities carried out by the mother, father and children is as follows: The mother is depicted in the home preparing food. It is narrated:

“Yule mama alichuma majani na maua akayakatakata na kuyapika, ikawa mboga. Kisha alipika ugali wa udongo.” (The mother gathered leaves and flowers, sliced and cooked them as vegetable soup. Then she cooked stiff porridge using soil as flour)”.

The father is depicted working outside the home. It is narrated that when the father returns home from work, children welcome him by cheering him up saying *“Baba huyoo!”* *Baba huyoo! (Here comes father! Here comes father!)*. The mother is then depicted laying the table. Family members gather around the table to eat the prepared food. When eating, the father is depicted as an authoritative parent with authority who rebukes a child who is talking with mouth full.

Figure 25 depicts a situation where the mother in the story is illustrated serving the father who is probably back from work (*Kusoma* Four for grade two, p. 45).

Figure 5.27: Boy and girl role-play as parents



Source: *Kusoma Kitabu cha Nne* (p.45). The mother serves the husband with food. The husband is back from work. Note how the wife/mother presents herself before the husband/father in serving him. Such presentation is traditionally considered feminine and appropriate.

The second example from a Kiswahili textbook for grade seven also socializes learners into traditional gender roles in such categories as work, personality traits and acquisition of skills. The grandfather and grandmother explain to their grandchildren what traditional/indigenous education for girls and boys at puberty comprised. It is narrated that the initiation of girls was done inside the house at home, while that of the boys was done in the bush away from the home. The difference in the location of training is important in relation to the training aspects that were carried out. Girls underwent training to be prepared for motherhood roles in and around the home. After undergoing training, the graduate was expected to get a fiancé, get married and finally become a mother. Boys, on the other hand, were trained to become 'real men', (hardworking' and 'wise'). Table 5.48 shows the demarcated content of the curriculum between girls and boys during the passage of initiation rites.

Table 5.48 Content taught to girls and boys during initiation rites

Training aspects for girls	Training aspects for boys
Domestic activities/chores	Looking after wife and children
Rearing children	Self respect
Preparations of recipes	Defense and security
Serving family members	Serving family members
Reproductive health	Bravery
Love	-
Co-operation	-
Respecting others	-
Patience and tolerance	-
Symptoms of diseases	-
Types of medicine	-

The two narrations in *Kusoma* Book Four and *Kiswahili* Book Seven concur with the socialization theory into gender identities. According to the socialization theory, girls and boys are socialized into different roles, traits and skills that are feminine or masculine. ‘Feminine’ positive traits such as co-operation, patience and tolerance are taught to girls while positive personality traits regarded as ‘masculine’ are skills such as bravery, defense and security, are meant to boys. Working outside the home is depicted for males while females are depicted working in and around the home doing domestic chores and also attending family members when they are ill. Illustrations and narratives in most cases portray female and male characters in stereotyped gendered roles. Mothers were depicted as housewives, while fathers are depicted as having jobs and participating in the broader society. Fathers were shown as heads of households as they were bread earners and also in charge of disciplinary issues in the home. In most rural areas in Tanzania, initiation rites are practiced as has been narrated in the story.

As narrated above, boys and girls are taught different content within these traditional practices of rites of passage. For example, before a wedding a girl is given instructions on how she should behave as a woman towards the husband and his relatives. She is also instructed on how to fend for the home and perform other household chores. It should be noted here that one underlying piece of advice is based on the assumption that the woman will strive to make the marriage work. The husband to be is not given such instructions on being a responsible parent like the bride. The wife to be is even instructed to maintain confidentiality when mistreated by the husband and is called upon to forgive the husband even if the husband commits adultery. Unfortunately, this is also reinforced in school textbooks and is not reproached as a hindrance to gender equality during the teaching and learning processes.

5.8 Summary of Findings Across Textbooks of Different Subjects

5.8.1 Introduction

The presentation and discussion of the findings on the portrayal of gender roles in textbooks in this chapter have been done according to subjects. The following is a summary of the study findings of textbooks across subjects. The categories, which have been used in relation to the portrayal of gender roles to male and female characters in textbooks as have been noted at the beginning of this chapter, are:

- Frequency of appearance/occurrences of characters;
- Occupations;
- Productive and reproductive roles;
- Power in association with:
 - leadership positions
 - Ownership of property (assets and goods)
 - Use of technology
- Personality traits;
- Sports and leisure activities; and
- Use of language

5.8.2 Portrayal of frequency of appearance of characters

In the first category, the overall frequency of appearance of named, illustrated male and female characters in the textbooks is summarized in Table 5.49.

Table 5.49 Total number of characters in each subject

Number of characters	Voc. Skills	Social Studies	Science	Maths	Eng	Swahili	Total	%
Males	452	263	405	310	150	915	2495	66.6
Females	84	121	281	226	98	440	1250	33.4

Data in Table 6.1 shows that females are less presented in terms of the frequency of appearance across all content analyzed textbooks. Females compared to male characters have been under represented in terms of named and illustrated characters. As has been noted in this chapter (five) there has been frequent failure to name and illustrate female characters when compared to male characters. The findings in textbooks of each subject show preponderance of males over females. The overall appearance of male characters is greater than those of females (66.6% and 33.4% respectively).

5.8.3 Pegging of work employment

The second category shows a summary of the pegging of occupations to female and male characters. The summary across textbooks content analyzed is presented as Table 5.50.

Table 5.50 Overall pegging of occupations to characters

	Number of occupation in subject textbooks for:							
	Voc. skills	Social Studies	Science	Maths	Eng	Swahili	Total	%
Male	10	37	17	12	35	41	111	69.1
Female	4	10	6	5	14	15	54	30.9

Data on Table 5.50 show that the overall pegging of male and female characters to employment favors males in comparison to females (69.1% for males and 30.9% for females). The trend that has been noted in the findings of the textbooks of each subject in relation to gender stereotyping in the pegging of occupations appears to be consistent. For

example, while there are no pegged female carpenters in all textbooks, there are no male nurses or secretaries depicted in all textbooks of the six subjects that have been content analyzed. Another pattern, which is also consistent within the pegging of characters to employment, is of the pegging of characters to leadership positions. Women with the exceptions of four head teachers are pegged at the low ranks of the social hierarchy of the labor force in any given institution. Males for example, have been pegged as Presidents of countries and political parties, Prime Ministers, Principal Secretaries, army commanders and top scientists.

Findings in Table 5.50 show that overall the presentations of occupations are sex typed. The implication to both boy and girl learners would be that certain jobs are compatible with woman's femininity and certain jobs are of man's masculinity. In view of the changing trends in employment patterns where women take what are considered men's jobs and men likewise do women's jobs, writers of textbooks are required to write textbooks that break job stereotyped patterns for men and women. Women as well as men should be shown as carpenters, masons, pilots and engineers; while men as well as women should be shown as nurses, secretaries and typists. An attempt by writers should be made to break down this pattern of employment stereotyping as it has negative effects on both boy and girl learners.

5.8.4 Depiction of ownership of property

The summary of the depiction of ownership of property to male and female characters has been in terms of goods and assets. The depiction of ownership of property shows the one aspect of power, namely economic power. The depiction of property ownership has been noted in Kiswahili, English and Mathematics textbooks. The depiction of ownership of property to male and female characters is in terms of number of goods and assets that have been pegged. The frequency of the characters that have been shown to ownership of property is summarized in Table 5.51.

Table 5.51 Summary of frequency of pegging of property ownership

	Textbooks for		
	English	Mathematics	Kiswahili
Males	27 (73)	25 (64)	19 (45)
Females	20 (28)	10 (27)	9 (10)

Data in Table 5.51 indicate that both male and female characters have been depicted as owners of some property (wealth). What can be noted however, are the apparent differences in terms of the number of goods and items depicted to male and female characters and also the frequency of males and females shown in association with property ownership. The frequency of depiction favours males. Of the items and goods that have been depicted, males own 64. % while female ownership is 35.5 %. The range of property owned by male characters is thus greater than that of females. Also the percentage of the males pegged as owners of property is 73.7 compared to 26.3 for females.

As noted in the discussion in this chapter, wealth attached to males has been more valuable compared to the property depicted to females. In most cases, in all subject textbooks that have been content analyzed, males have been depicted owning the kind of property, which are factors of production. These goods and assets can be used to produce other valuable goods. Property pegged to males includes land, cattle, shops and motor vehicles. Women have been depicted with the ownership of property that is perishable and of less valuable compared to that owned by males. It has also been noted that the goods and property that have been pegged to females are those that assist females in carrying out productive roles in and around the home.

Besides this depicted pattern of ownership, males have often been shown as possessing the power to decide what to do with what they own. They have for example, been presented distributing land to their children. In some incidences males have not only been presented with the ownership of a great range of property but also have the ability to borrow and invest. Males have also been depicted as having a higher purchasing power and thus able to purchase a great range of valuable property and also possessing the power to decide to sell valuable property.

5.8.5 Depiction of leadership positions

The depiction of characters in leadership positions denotes the disposition of power distribution between males and females. Data in Table 6.4 shows the overall portrayal of the distribution of leadership positions in Social Studies, English and Kiswahili textbooks.

Table 5.52 The overall pegging of leadership positions

Textbooks for						
English		Kiswahili		Social studies		
No. of leadership positions	No. of characters	No. of leadership positions	No. of characters	Frequency of leadership positions	Number of characters	
12	17	14	38	19	68	
1	1	5	6	4	6	

Data in Table 5.52 shows that the overall depiction to leadership positions favors males. Where reference is made to leadership roles, the frequency distribution of male and female characters has also been skewed in favor of males. Males have not only been pegged to most leadership positions but are in the majority. The overall percentage of the types of leadership positions pegged to males is 82.6%. At the same time the percentage of male characters to leadership positions is 91.9. Female characters have not only been presented in fewer types of leadership positions, but also few have been pegged to leadership positions. The overall presentation of leadership positions indicates that males have been depicted as decision-makers while females are the followers.

As noted, writers of these textbooks have reinforced to an over exaggerated way of what prevails in the Tanzanian society regarding distribution of leadership positions. Such depiction denies a girl learner of role models in leadership. The fact that there are few female leaders in Tanzania as a result of the positive discrimination policies to enable women to hold leadership positions should inspire textbook writers to present female characters in leadership positions. Such depiction would act as role model to girl learners. It would also socialize boy and girl learners to the fact that given the opportunity females are capable of being leaders and that all people including males should respect such leaders.

5.8.6 Presentation of characters in association with technology

The depiction of characters in association with technology denotes, among other things, power relationship between male and female characters. The association of characters to the use of technology could mean ownership of the portrayed technology or carrying out of activities and making the process easier. The owner or user of the technology makes life

easier. Data in Table 5.5.3 shows a summary across all textbooks of the frequency of the pegging of male and female characters in association with technology. Data in Table 5.53 also show the number of technology males and females have been associated with.

Table 5.53 The overall pegging of characters to technology

Textbooks for								
	English		Social studies		V Skills		Kiswahili	
	No. of technology	F. of characters	No. of technology	Frequency of characters	No. of technology	Frequency of characters	No. of technology	Frequency of characters
Males	11	38	11	21	2	2	14	23
Females	6	14	1	1	-	-	2	2

Data in Table 5.5.3 shows how female characters compared to males have been disadvantaged in being associated with technology. More males have not only been depicted to more types of technology but also to modern technology as has been discussed in the presentation and discussion of the findings in this chapter. As noted in the Science textbooks, for example, while males have been presented using electricity when cooking, women have been depicted using firewood. In the two incidences where characters have been shown in learning the intended skills, it is the men who have been illustrated doing so. Women have not been depicted doing so except in Kiswahili textbooks where they have been depicted making pots in the traditional way when machines are not applied. Even when school children visit an old woman to learn from her skills in pot making, the woman demonstrates such skills without the use of machines.

Such depiction denies females from seeing themselves as part and parcel of the developmental process and the use of technology. As this phenomenon runs across most textbooks in all subjects, it is likely that girls will be demotivated in learning subjects related

to technology and science when it is the question of taking the subjects at higher levels of the education system. The effect can be negative to girls.

5.8.7 Portrayal of characters to sports and leisure activities

As has been noted in the presentation and discussion on the pegging characters to sports and leisure activities, both characters of the two sexes have been shown involving themselves in sports and leisure activities. However, more males compared to females have been depicted as being involved in sports and leisure activities. The depiction of characters to sports activities has for example been noted in textbooks for Vocational Skills textbooks. Fewer girls have been illustrated compared to boys. Such depiction runs contrary to the set explicit official curriculum objectives of the subject where each learner (boy and girl) at the end of each teaching and learning activity is required to be able to realize the set curriculum instructional objectives.

A summary of the findings on the presentation of characters to leisure and sports activities across textbooks noted in three subjects is found in Table 5.54.

Table 5.54 Presentation of the pegging of sports and leisure activities

	English		Vocational skills		Kiswahili	
	No. of types of activities	Frequency of characters	No. of types of activities	Frequency of characters	No. of types of activities	Frequency of characters
Males	11	29	8	164	9	94
Females	13	23	5	21	7	28

Data in Table 5.54 show that more males have been shown in sports and leisure activities. Males have overall been shown in more types of leisure and sports activities. This has been the case with even in English textbooks where females have been pegged to more types of sports and leisure activities compared to males (13 versus 11). The frequency of depicted males however, is bigger compared to females (29 versus 23). As this is what prevails in

most communities in Tanzania where most times women and girls are involved in reproductive and productive roles especially with family obligations in the homes. Men and boys in the family have more leisure time and thus can involve themselves in sports and leisure activities. The presentation of females is determined by a stereotypical perception of women in relation to leisure and sports activities. Such depiction bars girls from fully involving themselves in such activities.

5.8.8 Pegging of personality characteristics

As noted in this chapter where the presentation and discussion of the findings have been done, characters of both male and female characters have been depicted in illustrations and in the text. The pegging of the personality traits in the text was noted in the English and Kiswahili textbooks.

In the English textbooks the findings have indicated that to a large extent both boys and girls have been positively depicted. This balance has not been maintained in the pegging of negative personality traits as more males have been negatively presented. There has been a noted tendency of authors associating males with negative personality traits.

Again, the portrayal of personality traits favours males and it is to their advantage in the building of a higher self esteem. The personality traits depicted can inspire males to model on them. Such modelling can be advantageous to them in carrying out economic and political activities outside the home.

In the Kiswahili textbooks more males than females have been associated with both negative and positive personality traits. Gender stereotyping in the pegging of what are considered masculine and feminine personality traits to female and male characters has been noted. The socialization of boys and girls into stereotyping personality traits favours boys in the carrying out of economic and political activities outside the home. This socialization puts the boys at a disadvantage in human relation endeavours such as being responsible parents who work harmoniously in the upbringing of children within the family for example.

5.8.9 A summary of use of gender biased language

The findings on the use of gender-biased language that suggest favouritism of one gender over the other have been noted to a lesser extent in both the English and Kiswahili textbooks. In the English language textbooks for example, it is only in book 7 English textbook (Unit 7) that the use of gender-biased language in relation to generics has been noted. The use of generics, which are masculine and were meant to present both male and female characters, have been used. Such generic terms that have been noted include **man's, man, he, his, mankind** and **businessmen**. The use of such generics makes girl learners shy away from associating with the text and this is even true with the topic where these generic terms appear. The topic in this case has been on the development of technology and how human beings have been involved in the development of technology. The narration in the story disassociates girls from the subjects related to technology. Such depiction reinforces the noted hidden messages from the textbooks of Vocational Skills subject, as they were fewer women compared to men portrayed as using technology.

CHAPTER SIX

6.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

In this chapter a conclusion has been made to answer the major research question on ‘how gender roles have been depicted in the 40 textbooks that were content analyzed’. Lessons drawn from the findings of this study and those from literature review on other similar studies will be presented and compared. The methods of data collection that have given rise to the findings will also briefly be presented. Conclusion to the research problem and answers to the accompanying research questions will be provided. The theoretical implications of the two theories that have been used in the study will be highlighted. In the light of the findings, policy and practice implications, as far as the production of textbooks that are free from gender stereotyping will be stated. Based on these policy implications, recommendations are put forward to stakeholders in the production and use of schools textbooks. Apart from the limitations of the study that were outlined in Section 1.16 of Chapter One, other limitations that emerged in the process of carrying out the study have also been stated. Recommendations for further research have been made.

6.2 Conclusions on the Findings

As it was stated in Chapter one, in the carrying out of this study, the research was guided by research objectives with accompanying questions. To be able to put the theoretical perspective of the gender policy on textbooks into action and to get rid of gender stereotyping in textbooks, the main research problem was to determine the portrayal of gender roles as a function of hidden curriculum. The research problem was supported by the main question "How are gender roles depicted in textbooks currently in use in primary schools and its relationship to school curriculum?" The findings of the study were specifically collected with the purpose of responding to the following study objectives:

- To determine through content analysis the portrayal of gender roles in primary school textbooks that are presently in use in most Tanzania Government primary schools.

- To determine the relationship between the portrayal of gender role stereotyping in Tanzania textbooks and Tanzania school curriculum.
- To evaluate the adequacy of mechanisms in place that ensure the writing of textbooks' that are free from gender bias by eliminating gender stereotyping in the process of production of primary school textbooks.

In determining the portrayal of gender roles in the forty primary school textbooks used in most government primary schools, content analysis as a research method was used. Research questions in the content analysis task were centred on a comparison of the portrayal of gender roles between male and female characters, as a reflection of liberal feminists' perspective of males being more privileged than females in the different arenas in the society. As was described in Chapter Four the study employed a combination of both quantitative and qualitative methods in data analysis. A detailed description of this method is given in Chapter Four. Content analysis allowed the identification of gender role stereotyping in textbooks in the selected categories. The findings as presented in Chapter Five were based on the identified categories.

6.2.1 Conclusions about research questions

On the determination of the portrayal of gender roles in primary school textbooks that are presently in use in Tanzania Government primary schools, the findings showed that there was gender imbalance in the depiction of gender roles in favor of males across almost all categories used in the content analysis except in the reproductive category where females are the majority. Female compared to male characters were underrepresented in almost all textbooks of the six subjects in terms of frequency of appearance, productive roles and possession of power. The general pattern was that there was an imbalance in the presentation between male and female textbook characters.

In terms of frequency of appearance more male characters than females were portrayed. This trend was noted in the literature review in Chapter Two (Section 2.3.3). In the reproductive (maintenance) and productive roles, women were portrayed in traditional reproductive roles doing feminine tasks in the home while men were portrayed in traditional masculine roles. The findings of the pegging of reproductive roles in Chapter five of this study has not departed very much from the findings that have been discussed in Chapter Two of the

Literature Review (Section 2.4.2 and 2.4.4). The findings have shown that in most cases females are depicted carrying out activities for the maintenance and caring of family members. Domestic tasks have been shown as the domain of women and girls. Females have been depicted spending more time indoors carrying out reproductive roles. In most cases men and boys have been presented in disassociation with these activities. The few males depicted carrying out reproductive roles are presented as helping (Section 5.4.5 and Section 2.4.3). The depiction is gender biased and females are overburdened in carrying out reproductive work. The noted presentation in the carrying of reproductive roles within domestic surroundings is not fair and is gender biased and stereotyped.

In productive roles males as compared to females have been more exposed to carrying out productive activities. The findings of this study have in most cases been in agreement with the findings of the reviewed literature (Section 2.4.5-2.4.6). There has been a rigid division of labor in the pegging of the productive roles to male and female characters. Such pegging confines readers to a narrow view of male and female related traditional occupations. The pegging is stereotyped in what society appreciates as being proper to males and females. Most of the careers that relate to service provisioning such as nursing, first aid, counseling and teaching have in most cases been pegged to females. Oftentimes males are presented in productive roles that are remunerated while this is not the case with females. It has also been noted that at times the presentation in textbooks does not portray the real prevailing situation. The depiction of salaried women employees was also underrepresented. The role of women in carrying agricultural activities has been under valued (Mukangara and Koda in Tanzania and Davies-1995, in the Commonwealth African countries).

In relation to portrayal of leisure and sports activities more males than females are presented in these activities. This is what prevails in society in most cases. The gender division of labor is rigid and not fair as it overburdens female members doing domestic work. Females therefore, have less leisure time compared to the male counterparts within the household. The girl child has less leisure and less outdoor time to play since she is expected to assist her mother who has more indoor productive and reproductive activities to perform than her father (Mukangara and Koda 1997:47).

The findings in the depiction of personality traits showed that they were differentiated between feminine and masculine characteristics. An example of the demarcation of

personality traits to male and female characters can be found in Tables 2.3 and 2.4 from a Kenyan textbook (Obura 1991). These findings in the study have also been consistent in the findings in the literature reviewed (Section 2.5.6). Females and males have for example, been presented in traditional feminine and masculine way. Females have been negatively described as weak, sensitive, submissive and dependent on men. They have at the same time in most cases, been described positively in personality characteristics that relate to human relations, such as being kind, affectionate, loving, trusting and sincere. Male characters on the other hand are positively portrayed as brave, courageous, adventurous and fearless but negatively shown to be cruel, quarrelsome, thievery and lazy. It has been noted that boys might interpret this as being prestigious and an act of heroism to be involved in such anti-social behaviour. Textbooks need to depict the appropriate positive and negative personality traits for both girls and boys to emulate to judge the worthiness of such behaviour.

In the power category, males have been pegged as powerful while females have been depicted as being powerless. More males have been depicted in leadership positions. Such presentations in textbooks where the depicted females are few in leadership positions deprive girls of role models in the political arena. A positive attitude can also be developed among boys and girls that females are also capable of holding leadership positions. In terms of property ownership, males have been presented owning property of high value. Such depiction may reinforce the traditional thinking and prevailing situation that men are the rightful owners of wealth at household and community levels even if females have a share in the acquisition of such property. Male characters compared to females have been pegged in association with technology, which enable them to carry out productive activities with ease.

The depiction of gender biased language especially the use of male generics has not very much featured in the content analyzed textbooks. The only recorded depiction of the use of gender biased language is in Section 5.6.12 of Book 7 of the English textbook. Such conclusion is in line with the observation in the reviewed literature (Section 2.6.5). As had been noted earlier, this is a result of the nature of Kiswahili language which does not have gender based pronouns. Kiswahili pronominal is neutral. The use of the Kiswahili pronoun does not add the number of characters unless the pronoun is accompanied by a female name or / and illustration.

In conclusion of the portrayal of gender roles in textbooks shows clearly that content analyzed textbooks are not free from gender stereotyping as required by the Education and Training Policy of Tanzania. This being the situation, there is need to determine the relationship between the portrayal of gender role stereotyping in Tanzania textbooks and Tanzania school curriculum as textbooks form part of the official curriculum. This leads to the conclusion of the second objective of the study that of relating to the portrayal of gender roles in textbooks and the Tanzania school curriculum.

6.2.2 Conclusions on the relationship between genders with school curriculum

The relationship between the portrayal of gender roles in primary schools and the Tanzania school curriculum was discussed in Chapter 3 of this study. It was shown that once the official intended curriculum guidelines are developed by TIE and approved by the MOEC, the curriculum is usually transferred into pupils' textbooks and teachers' guides (Section 3.2.1). Textbooks play an important role in implementing the official intended curriculum and they occupy a big amount of time textbooks occupy in the instruction process (Section 3.3 and 3.3.1). In implementing the official curriculum, textbooks also convey gender role messages as part of the hidden curriculum.

Gender role messages in textbooks have also been known to be responsible in reproducing gender inequalities between boy and girl learners in the schooling and specifically in the teaching and learning process. As has been noted, learning of the officially-sanctioned curriculum is via textbooks. The issue of reproducing inequalities has been recognized in the Tanzania education system as has been manifested in the Education and Training Policy of Tanzania (ETPT). As has been shown in Chapter one, the policy addresses among other issues gender equality in the schooling process. Although access to education (which has been addressed in the policy) is one of the important aspects related to gender equality, addressed in this policy also is the issue of gender bias, particularly in the schooling process which includes the elimination of gender stereotyping of the curricula, classroom practices and textbooks (MOEC 1995). This has been discussed in details in Section 3.4 to 3.4.1.

As has been noted in the ETPT, the role of textbooks as one of the key aspects in bringing about gender equality in the education system is to eliminate gender stereotyping in textbooks. While the ETPT has an explicit preference to supporting gender equality through

elimination of gender stereotypes in textbooks, Komba (1997) examining the state of the quality of textbooks used in Tanzania schools noted the lack of knowledge on the extent of the portrayal of gender stereotyping in the textbooks. He therefore, recommended the need to make a thorough study on gender and textbooks as there was knowledge gap between the policy intentions and the extent of the portrayal of gender roles in textbooks in use. As the presented findings have shown the textbooks are gender biased and stereotyped.

In the implementation of the curriculum it is important that the set curriculum objectives are realized by each individual student regardless of her/his gender. In setting and realizing instructional objectives, the emphasis in realizing the objectives is the individual who is evaluated not as a group (Print 1987). As has been shown through the findings, gender stereotyping in textbooks disadvantages some learners on the basis of gender differences. When girls are exposed to the same curriculum as boys, the messages girls receive would by and large negatively affect them.

Based on the Hidden Curriculum Theory and the corresponding Social Learning Theoretical Framework which have been discussed in Chapter 3, it has been argued when children read textbooks, they formulate gender identities through imitation and modeling, apart from learning knowledge and skills from the official intended curriculum. Negative gender socializing effects from textbooks contribute to gender inequality in the schooling process, contrary to the aims stipulated in the ETPT. The following is a summary of these effects when the portrayal of gender roles is biased and stereotyped as has been narrated in Chapter Three:

- Girls lack strong role models to identify with hence:
 - Socialized to consider only a narrow range of careers and occupations. The girls' employment options open to them become restricted. This also implies that most work skills are exclusively for males and that females are not implicitly required to acquire the knowledge and skills related to these jobs,
 - Fail to enroll in subjects such as mathematics, science and technology courses, and
 - Denied of leadership models;
- Females are omitted or underrepresented in textbooks. This communicates messages that they are less important and are of low status than males and the implication is that

females do not play an important role in society particularly in the development endeavour;

- Leads to the reproduction of patriarchal relations in the society. Patriarchy is a system of male dominance and subordination of women in different spheres of life (Keller et al 1999). Feelings among many girls that they are inferior to boys are inculcated;
- The child's own development potential and toward other children is affected when negative attitudes are pegged to her/him. Such depiction also impairs the development of self esteem;
- Children develop a distorted understanding that the responsibility for nurturing and upbringing of children is a domain of mothers and not fathers. This makes readers assume that, it is natural for those activities to be carried by females and not males; and
- Leads to lack of self-esteem in girls from which boys are less likely to suffer. Thus, the absence of women's history, mathematics and science as has been noted in schools can induce.

Going by the above negative effects, it can rightly be argued that while the official curriculum is the same for both girls and boys and is implemented by the same teachers, females are exposed to curriculum of inferiority and this is partly taught through textbooks that are gender biased (Witt citing Bernard in Basow 1993). In most cases such gender biased textbooks do not ensure the realization of the set official curriculum objectives as has been clearly shown with Vocational Skills textbooks (Section 5.2.1). When schools continue to use textbooks which are gender biased, they are not just condoning the attitudes present in textbooks, but are sanctioning and verifying those attitudes as official (Witt 2001) citing Olson 1980). It is important to portray a positive image of both female and male characters in textbooks in the bid to cultivate gender equality between boys and girls. Such portrayed women also provide images, with which girls can identify. The production of non-sexist textbooks has positive effects as has been discussed in Chapter Three (Section 3.7.1).

6.2.3 Available mechanisms to eliminate gender stereotyping

To evaluate the availability of mechanisms that are in place that ensure the writing textbooks that have no gender stereotypes in the process of production of primary school textbooks was the third objective of the study. The accompanying question was whether or not there were any deliberate efforts on the part of the BMU of Ministry of Education and Culture and other

institutions such as publishers, responsible for the production of primary school textbooks to see to it that textbooks are free from gender stereotyping. The literature review in Chapter 3 (Section 3.8.1-3.6.8) has covered the way relevant institutions have fared in the struggle to eliminate sexism in school textbooks. The successes and challenges have been discussed.

The findings in Chapter Five show that the mechanisms that are in place to track down gender stereotyping by the MOEC and publishing house are inadequate. This inadequacy has been contributed to the lack of an adequate guidelines designed to eliminate gender bias in educational materials including textbooks. As has been noted in Chapter Five the elements in the Evaluation form of the BMU which is supposed to assist in the elimination of gender stereotyping in the process of production of school textbooks, are much based on the official curriculum on such aspects of ‘conformity to the topics of syllabus, scope and sequence of writing, methodology and appropriate use of language and the general presentation’. There is no single word or phrase that denotes gender. The only statement that is assumed by the BMU to eliminate gender role is the statement on ‘*The general acceptability of the textbook on moral, social and religious depiction*’. Without substantial elaboration as it is in this BMU form and the absence of any explicit reference to gender equality suggests that the elimination of gender stereotypes as advocated in the ETPT is not one of the priority objective of the MOEC of Tanzania in the production of textbooks. The goal of producing textbooks with the objective of eliminating gender stereotypes in textbooks is not yet supported by an explicit guideline. The need to have an articulate guide is important in the realization of production of gender friendly textbooks. Such guidelines would help people involved in the process of the production of textbooks.

As has been noted such a statement is too general to assist a writer, editor, publisher, illustrator or assessor to eliminate gender stereotyping in textbook manuscript. The managers of publishing houses have indicated that while they were aware of the importance of writing textbooks that were free from gender stereotypes, they very much relied on the guideline provided by the BMU in the production of textbooks.

6.3 Implications for the Theoretical Frameworks of the Study

Liberal feminism which has been used as the theoretical framework for content analysis of this study has led to the findings that the content analysed textbooks are gender biased. The proposal by liberal feminists that there is need to expose and critique gender bias in the schooling system and in this case, on textbooks has been done. It should be noted that liberal feminism, a theory developed in the western world within the context of these countries fits in the educational environment as regards the portrayal of gender roles in textbooks. This is despite the different contexts where the textbooks have been produced. The depiction of gender roles in Tanzania can well be understood from the cultural underpinnings from the colonial and post-colonial epochs. While taking the basic elements of liberal feminism theoretical framework in analysis gender bias in any given situation, historical, cultural and socio-economical contexts have to be given an upper hand.

Liberal feminism can be accommodated in a country like Tanzania where equality of opportunities is being supported by the government's policies like the Education and Training Policy of Tanzania. The government would like to make its legitimacy felt when it supports issues related to gender equality as part of the thrust of its constitution. It is on this logic that the government has come with issues of gender equality in the ETPT. It is in the same token that Tanzania is signatory of international and regional instruments that advocate gender equality (Section 1.2 of Chapter One). Based on the findings of this study that the textbooks in use are gender biased, lobbying and advocacy strategies can be designed within existing state machinery without confrontations in order to produce textbooks that are free from gender stereotyping.

The Hidden Curriculum Theory and the corresponding Social Learning Theory have been used in this study to explain how the socialization process through gender role messages from textbooks takes place. The study has looked beyond the explicit official curriculum by exposing gender roles in textbooks through underlying the curriculum experiences by learners who use the textbooks. Biased gender role messages in one way negatively impact on readers who have not been positively depicted in these textbooks. The hidden curriculum which is gender roles biased represents barriers towards realising gender equality.

Hidden curriculum is not easily identified, so the rhetoric of eliminating gender stereotyping in textbooks necessarily involves the unpacking of the taken for granted hidden gender role messages in textbooks. The unpacking of hidden gender role messages has been done in this study. Having exposed the portrayal of biased gender role messages that constitute the hidden curriculum and serves to reproduce social gender inequalities through social learning, the findings of the study can be used to come up with a gender inclusive curriculum. A gender inclusive curriculum according to UNESCO (2000) has to address all teaching and learning arrangements (including the learning environment) that affect student outcome. A gender inclusive curriculum examines an understanding of masculinity and femininity and takes into account social construction of gender. A gender inclusive curriculum is achieved by consciously selecting, reflecting upon, and addressing choices about classroom planning, implementation and evaluation. With a gender inclusive curriculum all gender related aspects addressed in the Education and Training Policy of Tanzania should be addressed by all stakeholders in the education system.

A key aspect of gender bias in education is gender stereotyping whereby subtle but powerful gender messages of what constitutes behavior, roles and careers of the different genders are conveyed through the education system. Elimination of gender stereotypes in textbooks is part of the struggle to extend choices and opportunities for boy and girl learners. This is a move towards a more just society. Clearly the socialization of gender roles and use of gender biased hidden curriculum lead to an inequitable education for boys and girls.

6.4 Conclusion of the Study

The above summary of the findings indicates that efforts to write textbooks that are free from gender bias have not been achieved. The textbooks that accompany or are part of the official intended curriculum have hidden negative messages that contribute to gender inequality in the schooling process. The realization of the goals of the Education and Training Policy of Tanzania of eliminating gender role stereotyping has therefore, not been achieved after over eight years of its existence. Gender bias has been perpetuated in all textbooks in the six subjects. The trend of the findings where gender stereotyping has been detected is almost the same regardless of the differences in:

- Subjects of the textbooks;
- Members of the subject writing panels;

- Illustrators and editors; and
- Publishing houses.

As findings indicate textbooks used in government primary schools in Tanzania are gender biased and stereotyped, it would be difficult for the government to realize gender equality between boy and girl learners in the schooling process as stipulated in the ETP of Tanzania. It has been established that messages that are conveyed to learners through the hidden curriculum disadvantage some of the learners, especially girls. As noted earlier on the negative effects on the portrayal of gender roles may hinder the realization of the stipulated objectives of the official curriculum.

It has been established that efforts to eliminate gender stereotyping in school textbooks are impeded by various reasons, including:

- Inexistence of comprehensive guidelines to track down gender stereotyping in textbooks. Both the BMU (Now EMAC) and publishing houses do not have such guidelines that would assist in the production of textbooks that are not gender stereotyped.
- Adherence of publishing houses to using inadequate BMU guidelines in the production of school textbooks. As already noted the BMU guideline items are inadequate as they are heavily biased towards the content of the topics in the official syllabuses and the appropriate style of writing as regards to the learners' levels of understandings.
- Lack of adequate training on the part of writers, illustrators, editors, assessors and personnel in publishing houses in the production of textbooks that are free from gender stereotyping.

6.5 Policy Implications of the Study

The findings of the study have policy implications to different stakeholders as far as the production of school textbooks as well as implementers of the school curriculum including teachers is concerned. There are about four types of audiences, among others, for which this study would have some policy implications for the endeavour to produce school textbooks that are free from gender role stereotyping. The type of audience and the role each play are the following:

- The Book Management Unit which is an organ of the Ministry of Education and Culture charged with the responsibilities of coordinating the production of school textbooks acceptable to the set standards;
- Publishing houses that produce textbooks desirable to the set standards;
- Curriculum developers, teacher educators, school inspectors and teachers who are responsible for ensuring the implementation of quality education in line with the Education and Training Policy of Tanzania;
- All people involved in the different stages of the production of school textbooks, including:
 - Personnel in publishing houses like managers, writers, editors, illustrators and book designers, and
 - Personnel in the BMU of the MOEC together with textbook assessors and members of the Educational Materials Assessment Committee (EMAC).

6.6 Recommendations

Based on the findings of the study, which have established that gender stereotyping exists in the textbooks and the fact that no adequate mechanisms are in place to get rid of gender stereotyping in the production of textbooks, recommendations have been made. The following recommendations are directed towards stakeholders in the production and use of textbooks. The recommendations are made in order to realise one of the objective of the ETP in Tanzania in eliminating gender role stereotyping in textbooks.

6.6.1 Recommendations to the MOEC

The following recommendations should be implemented by the MOEC:

- The Book Management Unit of the MOEC should coordinate the designing of specific and elaborate analytical checklist to enable the identification of gender stereotypes in textbooks. Such guidelines should also assist publishing houses, writers, illustrators, editors, assessors and members of EMAC in the production of non-sexist educational materials. The designed guidelines should therefore, assist in tracking down gender role stereotyping in textbooks.

- The BMU and other institutions involved in the production of school textbooks should organize training workshops for personnel involved in the production of school instructional materials as regards gender. The training should target personnel in publishing houses, for example , writers, illustrators, editors, assessors and members of EMAC so that they may become well informed about gender issues and the production of instructional materials. It is through such training that the personnel involved in the production of textbooks would be sensitized on observing gender aspects in the process of producing school textbooks.

6.6.2 Recommendations to curriculum developers, tutors and teachers

Gender responsive mechanisms should be developed within the existing educational institutions like the Tanzania Institute of Education (TIE) responsible for curriculum development and Teachers' Training College (TTCs) under the Directorate of Teacher Education of the MOEC, responsible for the training of teachers. Such set mechanisms through TIE should holistically:

- Develop a gender inclusive curriculum that does not perpetuate gender inequality;
- Create awareness of the inequalities in the schooling process as a prerequisite in promoting of gender equality; the curriculum they develop should be gender inclusive
- Train teachers on gender equality issues and enabling them to use educational materials in a manner that promotes gender equality;
- Train teachers to identify and critically review gender stereotypes of portraying characters in textbooks. Teachers should also acquire the ability to empower pupils to do so;
- Teachers, through curriculum and training, should be given clear instructions on the methodology of transforming book content to promote gender balance and void of gender stereotypes; and
- Teachers should be trained to avoid using teaching strategies that would undermine the values and images of female and male learners and also explore better alternative ways, which would promote gender balance in the teaching and learning process, so as to implement holistically gender aspects in the ETPT.

6.7 Implications for Further Research

To have a more comprehensive picture on the portrayal of gender roles and how the writing of textbooks respond to policy deliberations on writing non-sexist textbooks, further research can include studies in the following areas:

- Examine the portrayal of gender roles in textbooks that are used at other levels of the education system in Tanzania. The educational levels where such studies have not been carried out include pre-primary, secondary, teacher education levels and tertiary institutions;
- Investigate how pre-service and in-service teachers' education curriculum orientates teacher trainees and teachers in the field in gender issues especially those that relate to classroom use of textbooks from a gender perspective;
- Research on school related gender equality aspects that ensure gender equality in the schooling process. Such studies could include the investigation of teacher pupil classroom interactions and the carrying out of extra-curricular activities from a gender perspective; and
- Compare the portrayal of gender roles in textbooks that have been content analyzed and those textbooks that will be produced in future. This is especially relevant as of now where the policy from a single textbook to multi textbook is now in operation.

As already indicated in chapter one, one of the objectives of the study was to create baseline data that would in future be used to determine through comparative studies on the progress made in writing textbooks that are free from gender stereotyping. The importance of carrying out such comparative studies has become more prominent in view of changes that have been effected by MOEC, shifting from a single textbook to multi-textbook policy. As from 2002 full liberalization of the production of textbooks has come into force, private publishing houses can now produce school textbooks in a competitive manner. The production of textbooks by private publishing houses is monitored by the BMU of the Ministry of Education to ensure the production of textbooks that adheres to the set quality standards by the MOEC.

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**APPENDIX A: VALIDATION OF PERSONALITY TRAITS INTO FEMININITY,
MASCULINITY AND ANDROGENOUS**

Type of personality traits		Male	Female	Androgynous
	Polite			x
Benevolent/generous				x
Helpful			x	
Friendly				x
Hardworking				x
Clever				x
Smart				x
Daring		x		
Careful			x	
Courageous		x		
Cheerful				x
Patient			x	
Dutiful			x	
Funny		x		
Studious				x
Neat/Clean			x	
Strict			x	
Curious		x		
Aggressive (physical)		x		
Thievish		x		
Liar/unreliable		x		
Cruel/Unkind		x		
Greedy/selfishly		x		
Loving			x	
Stupid			x	
Shameful		x		
Lazy		x		
Impatient		x		

Mean/Selfish		x		
Untrustworthy		x		
Naughty				x
Lust for power		x		
Coward			x	
Wise				x
Heroic		x		
Showing initiative		x		
Inquisitive		x		
Brave		x		
Cunning		x		
Self respect			x	
Superstitious/witch			x	
Truant		x		
Quarrelsome		x		
Concerned with beauty			x	
Emotional/nervous			x	
Sorrowful/sadness			x	
Substance abuser		x		
Lazy		x		
Capable leader		x		
Good behavior			x	
Knowledgeable		x		
Drunkenness		x		
Artful				x
Skilled in counseling				x
Shy/Quiet			x	

APPENDIX B: CONTENT ANALYSIS GUIDE AND CODING INSTRUMENTS

The Content Analysis Guide has questions that lead to quantitative as well as qualitative analysis. The reliability coders coded the only the explicit quantitative content analysis. The researcher dealt with both the explicit/manifest and those leading to an in depth understanding of the portrayal of gender roles. The requirement of indicating the page number assisted in the discussion with reliability coders when there were differences in the coding.

Questions of Frequency of Appearance of Characters

1. How many female and male characters are shown in a textbook?
2. How many times does the text mention female and male characters?

Tasks to be performed

1. Count the number of times a male and female illustration appears. Indicate the page on which the illustration appears.
2. Count the number of times female and male characters are referred to in the text. Indicate the page of the textbook where the reference is made.
3. Compare the number of male and female characters in terms of:
 - (a) frequency of appearance;
 - (b) percentage of female and male characters; and
4. Fill in Table 56 the percentages in frequency of appearance of characters

Table 56: Coding instrument of frequency of appearance

	Coder 1		Coder 2		Coder 3	
Textbook for:	Males %	Females %	Males %	Females %	Males %	Females %
English						
Social Studies						
Mathematics						
Science						
Vocational Skills						
Kiswahili						

Questions on reproductive of activities/roles

1. How are female and male members depicted in carrying out activities in the family?
 - (a) Who are carrying out domestic/housekeeping tasks in the home?
 - (b) Are males and females presented at home in:

- (i) Child- rearing activities/roles? and
 - (ii) Cooking roles?
- (c) Do all members of the family participate regularly and equally in household chores and child rearing responsibilities?
2. How is the adult child relationship depicted in relation to:
 - (a) Contact with children?
 - (b) Emotional and material well being of children in such activities as feeding, washing, dressing, encouraging and comforting?
 - (c) Authority by answering children’s questions?
 - (d) Introducing children to new things?
 - (e) Helping them solve problems?
 3. Who is making contribution to the education of children?
 4. Who are depicted in showing feelings of tenderness?
 5. Are activities male and female characters engaged in stereotypical?
 6. How many of the depicted activities are not traditional female and male?
 7. Are traditional stereotypes upheld for female and male characters in terms of carrying out family roles/activities?

Tasks to be carried out

1. List the reproductive activities/roles pegged to male and female characters at the reproductive.
2. Show how males and females are being depicted in carrying out the identified reproductive activities.
3. Fill in Table 57 the percentages of males and females in reproductive roles

Table 57: Coding instrument of reproductive Roles

	Coder 1		Coder 2		Coder 3	
Textbook for:	Males %	Females %	Males %	Textbook for:	Males %	Females %
English				English		
Social Studies				Social Studies		
Mathematics				Mathematics		
Science				Science		
Vocational Skills				Vocational Skills		
Kiswahili				Kiswahili		

Questions on representation of occupations

1. What occupations are pegged to male and female characters in illustrations and text?
2. Are traditional occupational stereotypes upheld?
 - (b) Are women for instance portrayed as nurses and secretaries?
 - (a) Are men for example, portrayed as soldiers and pilots?
 - (b) Are women and men showed in occupations not traditionally taken by women and men respectively?
3. How are men and women depicted in occupations?
 - (a) Are men and women with a profession shown at all levels including top levels?
 - (b) Who are portrayed as earning a salary?
 - (c) Who are shown to be earning more?
 - (d) Are men portrayed in occupations usually reserved for females?
 - (e) Are women portrayed in occupations usually reserved for males?
 - (f) Are mothers shown with employment outside the home?
 - (g) Are mothers employed outside the home presented favorably?
 - (h) Are women working outside the home holding administrative or technical jobs?
4. How are men and women differently presented in work employment roles?
5. Which of these differences have been emphasized?
6. How many of the jobs require educational qualifications?

Tasks to be accomplished

1. List the depicted occupations for male and female characters in illustrations and text.
2. Indicate the page number in which the females and male character appears.
3. Present the percentages in the Table 58.

Table 58: Coding instrument of occupations

	Coder 1		Coder 2		Coder 3	
Textbook for:	Males %	Females %	Males %	Females %	Males %	Females %
English						
Social Studies						
Mathematics						
Science						
Vocational Skills						
Kiswahili						

Questions to depict power relations

1. Who has power?

2. What is the source of power?
3. Who are described as leaders and followers?
4. Who are depicted as generators of power in carrying out activities?
5. Who are depicted as buyers and sellers?
6. What does each character depicted to purchase?
7. Are there general patterns on the items purchased or sold?
8. Who between males and females possess more and therefore buy or sell more?
9. Who are depicted as borrowers?
10. Who are depicted as borrowing more or borrowing nothing?
11. What are the depicted borrowing patterns?
12. Who are depicted as participants in investment and serving activities?
13. What is the pattern of investment and serving?
14. Who are depicted as more generous in terms of giving and sharing?
15. Who are given more responsibilities with large sums of money?

Tasks to be carried out

1. List the pegging of leadership positions to male and female characters.
2. Show how males and females are being depicted in leadership positions.
3. Fill in Table 59 the percentages of males and females in leadership positions

Table 59: Coding instrument of leadership positions

Textbook for:	Coder 1		Coder 2		Coder 3	
	Males %	Females %	Males %	Textbook for:	Males %	Females %
English				English		
Social Studies				Social Studies		
Mathematics				Mathematics		
Science				Science		
Vocational Skills				Vocational Skills		
Kiswahili				Kiswahili		

Use of technology in carrying out activities

In carrying out different activities/roles in the productive and reproductive spheres the use of technology is depicted. The use of technology involves new skills and largely carrying out of a given activity easier when compared with carrying of activities without using a given technology.

Questions regarding the use of technology

1. What is the nature of technology used?
2. Who is depicted as having the skills for using the technology and why?
3. Does the technology require special skills?
4. How are male and female characters depicted as regard use of technology involving new skills such as driving a car?
5. What implications are there for those who have acquired the skills?
6. Ultimately how does the impact portray gender relations?

Tasks to be performed

1. List the depicted technology for male and female characters in illustrations and text.
2. Indicate the page number in which the females and male character appears.
3. Present the percentages in Table 60.

Table 60: Coding instrument associating characters to technology

Textbook for:	Coder 1		Coder 2		Coder 3	
	Males %	Females %	Males %	Textbook for:	Males %	Females %
English				English		
Social Studies				Social Studies		
Mathematics				Mathematics		
Science				Science		
Vocational Skills				Vocational Skills		
Kiswahili				Kiswahili		

Questions related to leisure and sports activities

1. Are boys and girls being presented in illustrations and on text alike as being able to participate in so called “boys’ games” and "girls’ games”?
2. How are the characters presented in games in terms of being *daring*, *showing excitement*, *showing initiative* as opposed to *timidity*, *non-competitiveness*, and *lack of initiative* and *passivity*?
3. Who are being portrayed as being active and creative as compared to being passive and lacking creativity?
4. Are the games the domain of females or males?
5. Who are being excluded from leisure activities?
6. How are males and females depicted in artistic activities such as singing, music, dance, and theatre arts?
7. How are male and female characters depicted in competitive sports activities?

Tasks to be performed

1. List the different leisure and sports activities shown in textbooks
 - a) Show the number of frequencies of the leisure activities that have been pegged to male and female characteristics.
 - b) Compare the pegging in percentages of male and female characters

Table 61: Coding instrument of leisure and sports activities

	Coder 1		Coder 2		Coder 3	
Textbook for:	Males %	Females %	Males %	Textbook for:	Males %	Females %
English				English		
Social Studies				Social Studies		
Mathematics				Mathematics		
Science				Science		
Vocational Skills				Vocational Skills		
Kiswahili				Kiswahili		

Supplementary questions on Social Studies textbooks on power relations

1. Are women who have played a part in history, politics or life of the country or community recognized?

2. Are significant contributions of women and men shown/omitted?
3. In the selection of content do the textbooks recount the history, geography or agriculture etc in a way that focuses on what women have done or are currently doing?
4. Do the authors of textbooks ignore women, their activities and achievements
5. Do textbooks include/exclude the contributions and roles of women/men in the society?
6. Do authors use men's interests and exploits to determine the content and structure of the textbooks (e.g. History told primarily in terms of war and political leadership)
7. Do textbooks only represent women as relevant in traditional roles as wives, mothers, sisters and daughters?
8. Are the experiences of females valued whether in traditional or non- – traditional activities?
9. Are the lives of people treated as of equal value regardless of being males or females?
10. Is equal attention paid to activities/work carried out by women as the activities performed by men?

Questions on gender biased language

1. Which are common nouns and pronouns used to refer to either male or female characters in the text?
2. Have pronouns been used appropriately when referring to females and males?
3. Are male pronouns used to refer to male and female persons?
4. Are generics used?
5. Are creative alternatives used to the verb 'man'?
6. Are prefixes and suffixes properly used to male persons?
7. Is gender neutral or gender specific titles for occupations used rather than use of male titles for occupations?
8. Do textbooks use subsuming language to describe the hypothetical persons?
9. How is the language used throughout the text?
10. On the whole is the language used gender sensitive?
11. If not, in which situations is the language used?
12. Is it sexist or inclusive in nature?

Questions on loci where female and male actors operate

The following questions have the aimed at assisting the researcher to have an in depth meaning of the carrying out of reproductive, productive and community roles

1. Where do male and female characters operate?
2. What is the locus of activities as depicted to each sex?
3. Who between female and male characters are generally represented in interior or exterior locations/loci?
4. Which gender's interest is placed in primarily territoriality (self, home and school) and secondary and extended territoriality (community and world)?
5. Who between females and males are generally portrayed in domestic or family settings?
6. What impact does the location of a particular activity/work have on the status of the action and the actor?
7. What is the impact of the locus on invisibility?
8. Which places signify importance and why?

APPENDIX C: INTERVIEW GUIDELINE WITH MANAGERS OF PUBLISHING HOUSES

I Background information

1. Name of Publishing House -----
2. Titles of textbooks published by this house-----
- 3 a). Was your house involved in the Pilot Project for Publishing (PPP)?
 - b). In what activities was your house involved in during the PPP Project?
 - c). In what ways has your house gained from the PPP Project?
4. What aspects did you learn on issues related to gender and the publishing of school textbooks during the Pilot Project for Publishing-PPP (1993-2002)?

II Mechanisms of ridding out gender bias in textbooks

5. What mechanisms has your house put in place in relation to the Education and Training Policy of Tanzania on gender issues and textbooks?
6. Do you have a publishing policy guideline on the production of textbooks that are free from gender stereotyping?
- 7 a) Do you have a gender equality assessment checklist, for use in producing instructional materials such as textbooks?
 - b) If no, do you think such checklist is important?
8. Do you have in-house or outside programmes for building the capacity of writers, illustrators, editors and designers to acquire the necessary skills for the enhancement of proper approaches and strategies in gender balance in the production of instructional materials?
9. How do you advise writers, editors, illustrators and designers to produce instructional materials that portray positive images of both male and female characters?
10. Do you have specific strategies to promote participation of women in the production of textbooks as writers, illustrators and editors?

III Relations with other institutions

11. How do you link with the Book Management Unit of the MOEC towards creating publishing strategies that take on board gender issues in producing school instructional materials?

12. How do you network and link the following institutions charged with publishing instructional materials in order to produce textbooks that are free from gender stereotyping?
 - (a) Publishing Association of Tanzania (PATA);
 - (b) Tanzania Institute of Education (TIE);
 - (c) African Publishers Network (APNET); and
 - (d) Association of African Scholarly Editors (AASE).
13. What mechanisms related to gender issues has your house devised for the production of school textbooks that are free from gender stereotyping?

VI Concluding remarks

14. What challenges if any does your house face in implementing the Education and Training Policy of Tanzania in writing textbooks that are free from gender bias?
15. How do you assess the status of school textbooks that your publishing house has produced as far as the portrayal of gender roles stereotyping is concerned?
16. What recommendations do you make to assist in the production of primary school textbooks that adhere to the 1995 Education and Training Policy of Tanzania in producing textbooks that are free from gender stereotypes?
 - (a) Recommendations to BMU of the MOEC
 - (b) Recommendations to other publishing houses
17. What initiatives would you consider important in relation to the production of textbooks that are free from gender bias?
18. Are there any other issues on gender and textbook publishing that may not be adequately covered in this interview that you would like to add?

APPENDIX D: INTERVIEW SCHEDULE WITH THE MANAGER OF BMU

Before going through the items in the interview guide, I expressed my appreciation for the cooperation which had been accorded to me by the members of the BMU Secretariat. They have all along supported my study by:

- Providing me with different documents related to this study which included:
 - the 1991 Policy on the Production and Distribution of School and College Textbooks,
 - the 1998 Circular No 2 of the New Approval System of Textbooks, and
 - the EMAC Manual;
- Training me to be an evaluator of school textbooks;
- Providing me with some works from publishers (drafts of textbooks) for assessment of quality as required by the EMAC guidelines; and
- Providing me with several textbooks which I needed for content analyzing. I purchased the other textbooks that were not available at the BMU stores.

I very much acknowledged the BMU manager and her staff for the support they had accorded me in my study. Prior to holding this interview, I had an opportunity of conveying to the members of the Secretariat of BMU, the objectives of the study and the relevance of the study to the MOEC in general and the BMU in particular.

The items of the interview schedule were as follows:

1. What had been the role of BMU as a midwife to the process of changing the system from single textbook state controlled system to multi-textbook market based system of textbook production?
2. In view of the implementation of the PPP which commenced in 1993 as a means of translating the “1991 Policy on the Production and Distribution of School and College Textbooks.” What has been the role of BMU in this transformation?
3. What mechanisms has the BMU instituted to ensure the production of quality school textbooks?
4. What kind of training programmes have you held in relation to the production of school textbooks and to whom?
5. What have been the gains and challenges in the launching of the 1998 New Approval System of Educational Materials from a single to multi textbook mode?

6. Since the promulgation of the 1995 Education and Training Policy of Tanzania on the issue that relates to gender and textbooks:
 - (a). What mechanisms have you put in place to ensure the elimination of gender stereotyping in the production of textbooks?
 - (b). Have you been able hold any kind of training that relates to the production of textbooks that are gender friendly?
 - (c). If yes, who were involved in such training and what was the content of the training?
7. Does the BMU have any relations with the following institutions involved in the different stages of school textbook production to ensure the production of non-sexist textbooks:
 - (a) Publishers;
 - (b) Writers;
 - (c) Editors;
 - (d) Illustrations;
 - (e) Members of EMAC;
 - (f)TIE (Responsible for curriculum development for pre-primary, primary, secondary and teacher training educational levels);
 - (g) Publishing Association of Tanzania (PATA);
 - (h) Book Development Council of Tanzania;
 - (i) Writers' Association of Tanzania?
- 8 (a) Apart from the EMAC Evaluation Forms of EFC4, EFS5 and EFR6, has EMAC produced other guidelines on textbooks writing?
 - (b) Are there specific guidelines in writing textbooks that relate to gender issues?
 - (c) If yes, what gender issues do these items in the guideline address as far as eliminating gender stereotyping in textbooks is concerned?
 - (d) Are you aware of any publisher(s) of school textbooks who has/have designed their own guidelines for use in addressing issues of gender bias in the production of school textbooks geared toward eradicating gender roles stereotyping since you have written EMAC guidelines?
 - (e) If there are such guidelines have they been made available to other publishing houses, the Secretariat of BMU and other interested parties/persons?
9. In your opinion what methods should be used to assess performance of publishers in writing textbooks that are free from gender stereotyping (non-sexist)?

10. You being the Manager of the BMU what recommendations (suggestions) would you like to make to the MOEC, publishers, authors, illustrators and other stakeholders involved in the production non-sexist school as required by ETPT?
11. Now that the donor financial support of PPP has ended, what would be the role of EMAC as far as writing of quality textbooks that take into account issues of gender equality is concerned?
12. Are there any other issues that have not been covered in this interview that you feel are important as regards production of gender friendly textbooks is concerned?

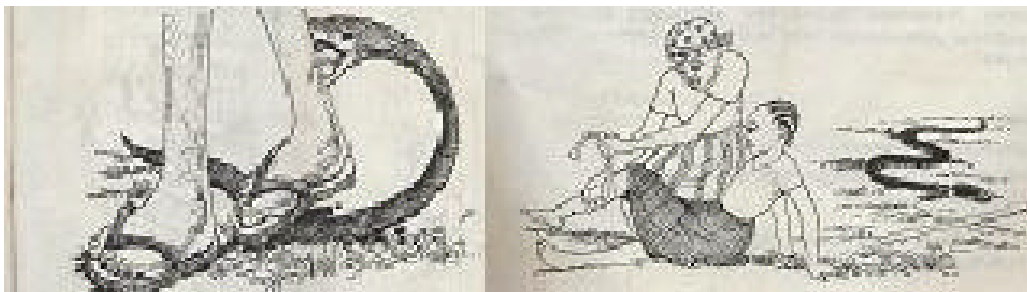
APPENDIX E: DEPICTED FIRST AID PERFORMANCE BY FEMALES TO MALES

Figure 28: A mother performing FA to an injured boy



Source: *Sayansi 1 Shule za Msingi: Darasa la Kwanza* (p.17). The woman performs First Aid to an injured child. It is in the stage of taking the injured child to a dispensary that the father is depicted. The father involvement is positive in bringing gender equality in the division of labour in the family.

Figure 29: A mother performing FA to a daughter bitten by a snake



Source: *Kiwasihili: Darasa la Tatu: Kitabu cha Mwanafunzi* (p.31). While it is the mother who is depicted performing First Aid to the daughter, it is the father who is described in the text that he was the one who killed the snake. He was also the one who removed the teeth of the snake from the leg of the daughter. The credit in the text goes to the father contrary to what is depicted in the illustration.

Figure 30: Girl performing First Aid to a boy



Source: *Sayansi: Kitabu cha Mwanafunzi: Darasa la Pili (2)* (p.21). The two episodes illustrated show that male characters are getting first Aid treatment from females. The man in the telephone call box is probably communicating with outsiders of the accident.

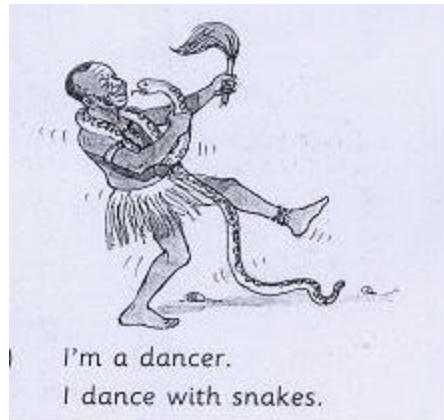
Figure 31: Women with their children in a Red Cross camp



Source: *Sayansi: Kitabu Cha Mwanafunzi: Darasa la Saba* (p.45). Women are depicted carrying out Red Cross activities. Mothers have brought the children to be attended at these camps. No males are depicted attending the needy children.

APPENDIX F: MALES PRESENTED AS BOLD, DARING AND STRONG

Figure 32: A snake dancer



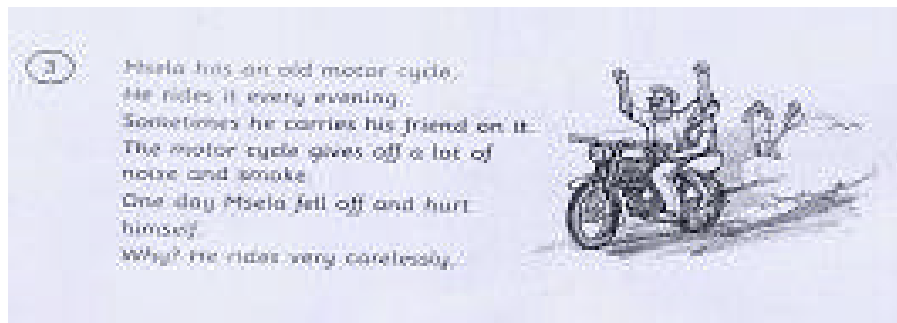
Source: *English for Primary Schools: Pupil's Book 4* (p.44). The depicted male snake dancer is not frightened of the snake. Contrast with a girl frightened of similar situation (*Kusoma: Kitabu cha Kwanza*, p.9).

Figure 33: A strong man killing two lions



Source: *Kiswahili 6: Kitabu cha Mwanafunzi* (p.55). A man named Hawafu is shown killing two troublesome lions. The lions killed goats and cows. Efforts to get lions killed were not successful. After killing the lion, the King appointed Hawafu a minister as recognition to his brave performance.

Figure 34: A rough motor cycle rider



Source: *English for Primary Schools: Pupil's Book* (p.48). Man riding a motorbike in a rough way. Such rough riding and the courage do so can enable him to compete in motor rallies that need such courage.

APPENDIX G: MALES PORTRAYED IN NEGATIVE BEHAVIOUR

Figure 35: Boys are fighting



Source: *English for Primary Schools: Pupil's Book 2* (p.11) A negative behaviour of fighting is shown to belong to male characters.

Figure 36: A man is beating a boy



Source: *Primary English Course: Pupil's Book 6* (p.33). Mr. Savai is beating a boy.

Figure 37: Two young men are planning to steal



Source: *Kiswahili: Darasa la Tatu: Kitabu cha Mwanafunzi* (p.31). The two young men in a village are thieves who are planning to steal cattle. Fortunately, an old man sports them and relays the information to other villagers.

Figure 38: Two men are fighting



Source: *Maarifa ya Jamii kwa Shule za Msingi: Darasa la Nne.* (p.39). Two male Maasai (Morani) are depicted engaged in a stick fighting game.

Figure 39: Two men are fighting over resources



Source: *Kusoma: Kitabu Cha Kwanza* (p.30-31). Two men who are depicted fighting for an animal and are later shown sitting together contemplating and regretting over the fight.

APPENDIX H: MALES AND FEMALES IN WATER FETCHING ACTIVITIES

Figure 40: A boy and a girl are fetching water



Source: *Kusoma: Kitabu Cha Kwanza* (p.25). A trend that has been noted in Science textbooks of males using technology in fetching water compared to females who are carry water in the traditional way. Note also the fact that because of using a trolley men are carrying more water than women.

Figure 41: Males and females are fetching water



Source: *Sayansi: Darasa la Kwanza* (p.17). What can be noted is that male characters are portrayed using trolley to fetch and getting water from a standing tape. This is contrasted with female characters who are carrying water on the heads and fetching water from various sources of water including running streams.