# AN INVESTIGATION INTO GENDER PERSPECTIVES IN TEACHER TRAINING: THE CASE OF IGOJI TEACHERS TRAINING COLLEGE 

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## DECLARATION

This project is my original work and has not been presented for a degree award in any other university.

$\frac{29^{\text {th }} / 10 / 2010}{\text { Date }}$

This project has been submitted for examination with my approval as university Supervisor.

## DEDICATION

To my darlings Ashford and Yvonne whose inspiration and encouragement to follow my dreams will be forever appreciated.

To my parents, Nyawira and Mbogori for all the sacrifices they had to make and for believing in me and teaching me the value of merit and achievement.

To all women who dare to pursue their dreams, it always pays to think of oneself.
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## Abbreviations

| EFA | Education for All |
| :--- | :--- |
| UNESCO | United Nations Educational, Scientific, and Cultural Organization |
| SMTs | Science, Mathematics and Technical Subjects |
| MOE | Ministry of Education |
| P1 | Primary 1 (Primary Teaching Certificate) |
| KCSE | Kenya Certificate of Secondary Education |
| MDGs | Millennium Development Goals |

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#### Abstract

A focus on teacher training is important to be able to address issues of teachers' personal and professional orientations to enable an understanding of how gender discrimination takes place in school and their role in addressing it.

The study sets out to explore gender perspectives in the training of teachers at Igoji Teachers' Training College in Meru South district of Eastern Province. The study had three objectives: to investigate and document gender ratios in the science and arts disciplines; to examine the current teacher training curriculum and its impact on male and female teacher trainees' professional and personal orientation; and to determine the challenges to instituting gender responsive teacher training programmes. The hypotheses that guided the study were that: teacher training educational resources are closely associated with gender ratios in science and arts discipline, the P1 teacher training curriculum has differential influence on male and female teacher trainees' personal and professional orientation, and there are challenges that constrain efforts to institute gender responsive teacher training, for both the individual as well as the institution.


Data was obtained using standard structured questionnaires, key informant interviews and focus group discussion. Systematic sampling technique was used to obtain a sample size of 100 male and female respondents and ensure that all elements were represented. The quantitative data obtained using the questionnaire was analyzed using the SPSS in form of descriptive statistics
and presented in percentages, frequencies and charts. On the other hand the qualitative data obtained using key informant interviews and focus group discussion was analyzed according to the emerging themes and presented descriptively.

The main findings of the study indicated gender disparities in enrolment of male and female students in the science and arts disciplines. Social and academic resources were responsible for the gender variations in the college. Social demographic factors also had an impact on performance and attitude, hence the enroliment in the science discipline. Next, the P1 curriculum had an impact on personal and professional orientation and the lack of elaborate gender training failed to equip the trainees with necessary skills to enable them deal with the different needs of boys, and girls while in the field as teachers. However, the gender sensitization at the institutional level had positive effects on gender relations within the college. Finally, the findings also show that a number of challenges impended on instituting of gender responsive teacher training. These included the centralization of teacher training, the maternity leave policy and lack of a gender policy at the institution.

This study therefore recommends the need for further research into teacher training colleges to get an elaborate national gender perspective. There is also need to incorporate gender studies into the teacher training curriculum as well as take into account gender differences to enable deal with gender issues at the national and institutional level. This can be achieved through
implementation of the national gender policy and an institutional gender policy. The teacher training curriculum should be in such a way that it promotes personal and professional growth by offering diploma certificates that can earn credit transfers when one pursues further education. In addition, a mentorship programme would be appropriate for dealing with negativity towards sciences and confidence building.

## CHAPTER ONE

## BACKGROUND TO THE STUDY

Understanding gender perspectives in the training of teachers is an important aspect in ensuring gender equality and equity in education. However, stakeholders have focused too much attention on making education accessible, with efforts to ensure quality performance, retention, completion and transition receiving very little attention (Siwolo, 2005).

### 1.1 Introduction

The proposal comprise of parts that introduce and explore the problem, objectives, theoretical frameworks and the methodology used in the study to be carried out at Igoji Teachers Training College.

In spite of the numerous efforts by the government of Kenya, in partnership with other stakeholders in education, to increase access to education for both boys and girls, gender disparities in favour of boys continue to exist. For instance, the Education for All (EFA) Global Monitoring Report (UNESCO 2003,) indicates that although Kenya has virtually attained gender parity in enrolment at both the primary and secondary school levels, gender differences continue to exist. This is particularly with regard to access to, and performance in science, mathematics and technical subjects (SMTs), retention, completion and transition. The gender-gap widens as one moves up the education ladder (MOE 2007).

Concerning this, Sweetman (2005) argues that there is need for urgent attention aimed at addressing gender inequalities that shape a girl's experience in the classrooms around the world; otherwise, the efforts in increasing access to education will be undermined. To respond to this need, it is necessary that focus be directed at ensuring gender responsive teaching and learning environments. Chege and Sifuna (2006) recommend that teacher-training institutions should institute programmes that address issues of both teachers' professional and personal orientation to enable them understand their own gendered socialization and identities as well as understand how gender discrimination takes place in schools and their role in addressing it. On the other hand, Otiende and Njoroge (2001) indicate that the teachers and the experience of being in school, will equip learners with opportunities to develop proper attitudes and social skills that are necessary for the practice of democracy and human rights. The skills and knowledge imparted will go a long way in promoting gender equality and equity not only in education but also in all aspects of development.

### 1.2 Statement of the problem

Teachers play a role in propagating the gender inequalities in education. However, this should not be the case. As Sweetman (2005) observes, teachers play a central role in the delivery of the curriculum and they are expected to do this without the influence of their social and cultural identities, which are gendered and constitute their daily lives.

The diverse problems that have led to lack of gender equality are connected to the role of teachers in propagating the inequalities. Thus, Chege and Sifuna (2006) emphasize the need to empower and support teachers for gender equality through coordinated efforts of pre-service
and in-service training institutions as well as ongoing professional development. This view, Onyango-Ouma (2006) argues will enable fulfill the function that education programmes should meet both the cognitive and immediate needs of learners in everyday life. It will also ensure that the school experience positively transforms the individuals' worldview, based on informal experiences, which include the hidden curriculum and lessons learners pick from teachers, which are not part of the formal curriculum.

## Research Questions

The study will seek to answer the following research questions:

- What are the gender ratios and what factors influence levels of enrollment and staffing in the arts and science disciplines?
- What is the teacher training curriculum and how does it impact on female and male teacher trainees' professional and personal orientation?
- What challenges are faced when instituting gender responsive teacher training programmes?


### 1.3 Objectives of the study

1.3.1 General objective

The overall objective of the proposed study is to explore gender perspectives in the training of teachers at Igoji Teachers Training College.

### 1.3.2 Specific objectives

- To investigate and document gender ratios in the arts and science disciplines
- To examine the current teacher training curriculum and the impact on male and female teacher trainees' professional and personal orientation
- To determine the challenges to instituting gender responsive teacher training programmes.


### 1.4 Justification

Gender inequalities in education are a cause of concern for education stakeholders and other development partners. Efforts to increase access through the initiation of free primary education and affordable secondary education, building of boarding schools and school expansion programmes in Kenya, have led to an almost gender parity in enrolment at the national level. However, these positive results have been undermined by gender disparities in the performance of the SMT (science, mathematics and technical) subjects, retention, completion and transition. Despite this, little focus has been directed towards dealing with these shortcomings particularly the role teachers play in the delivery of the curriculum with regard to gender equality as well as the role played by teacher training institutions in imparting the necessary knowledge and skills to enable teachers deal with the influence of their gendered social identities. A gender perspective in the training of teachers is therefore necessary. The results of the study can be used to develop and make recommendations for practical gender responsive teacher training practices. Moreover, the outcome of the study could be used to propose gender responsive institutional frameworks for student teachers as well as the general administration of academic and student
welfare. The study could also be a baseline information resource for teacher training institutions and students. In addition, the results could be used as a basis for further research into the field of gender responsive teacher training programmes.

### 1.5 Scope and limitation

The study will focus on the teacher trainees and members of staff with the aim of describing the gendered attributes of the individuals and those of the institution, and their influence training the training of teachers.

The availability and willingness of the respondents to participate in the study will not be guaranteed, though this is not expected to pose any problems, as the information required is not of sensitive nature. Thus, the researcher employed excellent interpersonal relationship skills to ensure co-operation.

## CHAPTER TWO

## LITERATURE REVIEW

### 2.1 Introduction

The general recommendation of a number of scholars (Sweetman 2005; Chege and Sifuna 2006; Otiende and Njoroge 2001) is that, there is need to put in place gender responsive teacher training programmes in all institutions to enable teachers become effective agents of gender equality, i.e., inside reformers. Muluwa-Banda (2003), however, argues that the greatest challenge to the endeavor is putting gender sensitive policies into practice in institutional management, learning environment and curriculum implementation.

This literature review is divided into: gender ratios in science and arts disciplines, academic programmes and their impacts on the professional and personal orientation of the teacher trainees; and challenges in instituting gender responsiveness in institutions.

### 2.2 Literature review

### 2.2.1 Gender ratios in the science and arts disciplines

As earlier stated in the introduction, the gender gap widens as one moves up the education ladder, thus having a trickle down effect in the various academic programmes on offer at the various levels. Despite the rapid expansion of education in Kenya, women continue to suffer dramatic under-representation. This, Chege and Sifuna (2005), argue is because of the influencing factors that limit women's education at the lower levels. The MOE (2007)
emphasizes the fact that although the enrolment of females has increased over the years, the and 2003 the average enrollment of females was $49.6 \%$ in primary teacher training colleges. Current data obtained from the Ministry of Education for January, 2009 indicates an average of $50.6 \%$ of females enrolled in the first and second year in government primary teacher training colleges in Kenya. Differences among teacher training colleges are dependent on the availability of resources to accommodate females and males. Another determinant factor is the requirements for enrollment to pursue certain courses. For instance the Ministry of Education requires that for one to qualify to enroll for the P1 teaching certificate, s/he must have attained mean grade of $C$ (plain) in KCSE with a $D$ (plain) in mathematics and $C$-(minus) in English (MOE, 2004) The stakes are even higher when choosing between undertaking the sciences or arts disciplines. The areas emphasized and the qualification requirements have often been to the disadvantage of girls in comparison to the boys.

Indeed the Republic of Kenya Economic Survey of 2004 reveals that female teachers make up $35.2 \%$ of the teaching force (Chege and Sifuna 2006). The authors cite further data, which indicates that Kenya faces female teacher shortage particularly in mathematics, sciences and even in a language like Kiswahili.

In Kenya, affirmative action to enable females greater chances to access teacher education is not provided for thus females' enrollment keeps fluctuating. Their numbers are still low compared to males in the science discipline within institutions due to girls' poor performance in the sciences as compared to the performance of males.

### 2.2.2 Teacher training curriculum and its impacts on the male and female teacher trainees' professional and personal orientation

The education programme for P1 teacher training as described by MOE (2004) is a two-year course made up of three terms in each year. The first year of study requires a student to take up all the ten subjects including Mathematics, English, Kiswahili, Science, Religious Education, Social Studies, Creative Arts, Physical Education, Information Technology and Education.

In the second Year, the subjects are divided into two options as illustrated below:

| Option A | $\underline{\text { Option B }}$ |
| :--- | :--- |
| 1.Mathematics and aspects of | 1.Social studies including aspects of |
| business studies | business studies |
| 2.Science including Home Science |  |
| and Agriculture | craft and drama |

In addition, a student in the second year of study is expected to undertake five additional subjects that are considered core. These are:

1. English
2. Kiswahili
3. Physical Education
4. Information Technology
5. Education, including Special Needs, Guidance, Counseling, and Legal

Studies in Education.

In spite of the fact that the primary teacher training course is said to have incorporated human rights and gender awareness in the curriculum, to respond to the contemporary issues in the society (MOE, 2004), the syllabus only mentions relationships but gender studies as an area of focus is conspicuously absent. This aspect is not only necessary as a matter of professional orientation but also mandatory in changing personal attitudes and behavior among the teacher trainees as well as challenging some of the deeply held assumptions that perpetuate gender inequalities (Sweetman, 2005).

In order to ensure gender equality in teacher education, the Ministry of Education has proposed strategies which include the institution of pre-service and in-service training programmes for teacher trainers and trainees on child centred and gender responsive pedagogy as well as develop gender responsive teaching and learning materials to promote human rights education, guidance and counseling (MOE, 2007). The incorporation of gender sensitive material in the in teacher training curriculum is important if inequalities reproduced through overt curricular knowledge as well as knowledge known as hidden curriculum of schooling (teacher's values, school ritual etc) are to be overcome (Marshall and Arnot 2008).

Onsumu (Business Daily, 27th Aug. 2007) recommends the need to link teacher training with the needs of the sector to ensure reduction of the high numbers of unemployed trained teachers.

This could include focus of replacing losses of teachers through attrition among other factors that need consideration.

Siwolo (2005) concludes by saying that teacher training must of necessity include training into the skills for gender responsive pedagogy; otherwise attainment of quality education and of the Millennium Development Goals (MDGs) and the EFA goals for gender equality and for education as a whole will for a long time remain an illusion.

### 2.2.3 Challenges in Instituting Gender the Gender Responsiveness in

## Teacher Training

Muluwa-Banda (2003) indicates that the main challenge has been to put gender sensitive policies into practice in the management of institutions. For instance, MOE (2007) argues that although institutional structures such as the Gender Commission, National Task Force for Gender and Education, a Ministerial Task Force on Girls Education and a Gender Desk at the Ministry of Education, lack of effectiveness of these structures continue to be a hindrance to gender equality in education. There is also confusion of gender studies and gender issues with women activism and feminism. These perceptions still pervade all social strata including toplevel decision makers. The result of this is insufficient commitment to gender mainstreaming even when decision makers understand and appreciate gender issues.

There is also lack of clear definitions of what constitutes the most appropriate forms of educational knowledge that are needed to sustain gender. These Marshall and Arnot (2008) argue are with regard to what values should be upheld; global human rights, or local and national rights and cultural values.

Moreover, gender equality is often viewed the world over as more about matching male and female access to traditional hierarchical and linear curriculum and about ensuring equal male and female representation in textbooks and materials or equal participation in classroom.

### 2.3 Theoretical Framework

The research will draw from two separate yet overlapping theories. The social learning theory and the feminist reproduction theory can be used to explain gender inequalities within the education setting, analyze the academic programmes from a gender perspective and the challenges these pose to instituting gender sensifivity in the training of teachers.

### 2.3.1 Social Learning theory

The social learning theory is behavioristic in nature and seeks to explain human behaviour based on reinforcement and modeling. According to Bandura observational learning, social imitation and the negative and positive consequences of an action shape a child's behavior. The action taken determines whether the behavior is repeated in the future, or not (Bandura, 1963).

Bandura (1977) identifies three basic social learning concepts.

1. Observation -whereby, people learn through watching actual people, verbal instrument and symbolic behaviour in the media.
2. Reinforcement - this could include internal satisfaction, pride or a sense of accomplishment. External reinforcement is often from those around.
3. Modelling process -this involves attention, retention, reproduction and motivation. Bandura emphasizes that this process must be completed for any behaviour change.

Social learning theory suggests that children develop personality through simply observing others' behaviour. After observation, the child does not always repeat it immediately, but may hold it in his/her memory to use later. However, not all observed behaviour is learned. Reinforcement may be positive rewards for appropriate behavior and negative rewards for unacceptable behavior. Those behaviors that receive positive rewards are likely to be repeated. The process of social imitation or modeling, involve children observing and imitating the behaviour of those around them. These models are often people in positions of authority. Bandura, 1963, notes that parents influence on children is diminishing as children spend most of their development years with peers and teachers.

### 2.3.2 Feminist Reproduction Theory

The feminist reproduction theory (Bourdieu 1998:5), states that society has embodied the historical structures of masculine order in form of unconscious schemes of perception and appreciation to an extent that breaking out of that circle lies in finding a practical strategy for objectifying the "categories of understanding" with which we construct the world. Dillabough (2003) continues with the argument in which Bourdieu seemed to believe that questions about the nature of masculine domination can be identified in all social aspects. In addition, his other argument was that social institutions were the most influenced by masculine domination since they were responsible for the maintenance of social order that is a key national project. Bourdieu is also said to point out education as central ideological site for the reproduction of gender inequality.

In this respect, Marshall and Arnot (2008) illustrate this by citing the sociology of the curriculum in the 1970s and 1980s in Western Europe countries in which the school curriculum could be viewed as a political arrangement and social construction. The relationship between what is offered in institutions of education as knowledge, everyday local or regional knowledge and the creation of the conditions for the reproduction of social inequality nationally is shaped by the distribution of power and principles of power control. Further illustration of this is given by the fact that education institutions are understood to be "productive" in that they create agency and social stratification through their knowledge producing work hence, their recognition in the role they play in social and cultural reproduction.

Dillabough argues that feminist reproduction theory has for nearly three decades been concerned with ways in which our "categories of understanding" about sex and gender reproduce a fundamental constant, if fluctuating, gendered division of labor, embodied in public consciousness and asserted through class relations in education. In addition, the theory has commented on contemporary misconception, including those made by gender theorists about any potential for the eradication of social inequality through liberal approaches stressing educational access and opportunity.

Feminist reproduction theory can arguably be seen as a critical consciousness in the education field for understanding a system that largely privileges men over women.

### 2.3.3 The relevance of the Social Learning and Feminist Reproduction Theories to the

 study.The research focus is on an education institution and according to the feminist reproduction theory, social institutions are responsible for propagation of inequalities especially those that favour the masculine dominion. Indeed, Stromquist (2007) argues that gender in recent studies has been recognized as an organizing principle in all social institutions, including education institutions. For instance, Kabeer (2003) says that women's access to education is likely to be curtailed by various forms of restrictions on their mobility and by their limited role in the wider economy. She also adds that where education is viewed as important for equipping girls become better wives and mothers, effects of education in changing the lives of the girls are limited. The two theories will be useful in assessing the restrictions by individuals, the institution and the society on women's/men's access to teacher training to enable explain the gender differences in general and subject enrollment as well as staffing.

The feminist reproduction theory implies the need to come up with a practical strategy for objectifying the "categories of understanding" with which we construct the world. A gender perspective informed by the social learning theory as proposed in the study is, as indicated by Suda (2001), is suitable for analyzing the contributions of women and men to the development process and the impact the process has on their lives and livelihoods and enables the world to be seen through their eyes. Moreover, by using this perspective the author argues that the differential impacts of policy plans, programmes and projects on men, women and children can be assessed. This assessment is therefore able to bring the objectivity that is necessary for
mainstreaming gender not only in Igoji Teacher Training College but also in the education sector as a whole.

The two theories will also come in handy in understanding the challenges that stand in the way of instituting gender responsiveness in teacher training. This will include aspects of socialization in the education context that touch on the informal curriculum, a critical dimension of schooling through which educational settings may introduce changes in social perceptions that continue to reproduce traditional values (Stromquist, 2007). This would cover a wide array of practices ranging from administrators' and teachers' attitudes and expectations, textbook messages, peer interactions, and classroom dynamics, to the greater school environment.

### 2.4 Hypotheses

The following hypotheses will guide the study:
i. Teacher training education resources are closely associated with gender ratios in arts and science disciplines
ii. The P1 teacher training curriculum has differential influence on male and female teacher trainees' professional and personal orientation.
iii. There are challenges that constrain the efforts to institute gender responsive teacher training for both the individual as well as the institution.

### 2.5 Operationalization of variables

### 2.5.1 Dependent variables

## Gender ratio

This refers to the relationship between the number of men and women in a population expressed in numbers or amounts. In the research, gender ratio will refer to the number of male students and staff in the science and arts departments in relation to the number of female students and staff in the respective departments expressed in percentages.

## Gender responsive

This refers to action taken to correct gender imbalances.
For the purposes of the research, gender responsiveness will mean academic and extra-curriculum activities that take gender into consideration.

## Personal orientation

This refers to an individual's basic attitudes or beliefs. To measure this, respondents will be asked questions regarding skills and knowledge on gender acquired through socialization and culture.

## Professional orientation

This refers to skills and knowledge gained from career training. To measure this, respondents will be asked questions regarding skills and knowledge on gender imparted during their training.

### 2.5.2 Independent variables

## Curriculum

This refers to the content of an education programme. In the research, curriculum will mean the content in the teacher education programme that has gender implications.

## Challenges

This refers to something that will need a lot of skill, energy and determination to deal with. To measure this, respondents will be asked questions about social- cultural practices and beliefs that question gender equality.

## CHAPTER THREE <br> METHODS OF DATA COLLECTION

### 3.1 Introduction

The purpose of this chapter is to present the research site and population, discuss the research design sampling techniques and data collection methods. The problems encountered during the research and the procedures for data analysis are also discussed.

### 3.2 Research Site and study population

Igoji Teachers Training College is located in Imenti South district in the Mount Kenya region in the Eastern province of Kenya, two hundred kilometres along the Meru-Nairobi Highway and one and a half kilometres off the highway. The history of the institution dates back to the 1960s. (See map 1.0 Page 19).

The study population comprised of seven hundred and nine teacher trainees in their second year of study. Those in the second year of study were made up of three hundred and eighty one males and three hundred and twenty eight females. The numbers for the students in the first year of study could not be established since new students were still reporting and registering as teacher trainees.


Map1 0. Map of Meru showifg the bocation of kgoil Teachers Training College

### 3.3 Research Design

The study was designed to elicit gender perspectives in teacher training. The data was collected at two levels: the individual and institutional. The reason for using the student teachers as the unit of analysis was that they were an important entity, in the sense that they go through the training. Individual teacher trainees vary in their characteristics based on social-cultural and economic status. To be able to achieve the objectives of the study, the descriptive crosssectional research design was used to collect both qualitative and quantitative data. Qualitative data was collected using closed-ended structured questionnaire, while focus group discussions and key informant interviews were used to collect the qualitative data.

The multiple methods of data collection offered different types of data, so the validity of one type could be useful in the verification by the other. This ensured credibility and the authenticity of the conclusions and recommendations made following the study.

### 3.4 Sampling Procedure

Igoji teachers training college is a large institution with a population of over one thousand four hundred teacher trainees. This universe could not be entirely and adequately studied given the time and resource limitations. It was therefore necessary to select a sample of the population for the study. The sample population was one hundred male and female teacher trainees selected for the survey. This number was sufficient to represent all the entities in the study.

The sample selection utilized the systematic sampling techniques to ensure representation of all elements in the study. Class registers were used as the sampling frame.

### 3.5 Methods of data collection

### 3.5.1 Survey method

This technique employed the use of standard structured questionnaires to ensure that all respondents were asked the same set of questions in the same sequence. The process involved self administered, closed - ended questions. This was used to generate data on individual backgrounds and personal views on their training. The exercise was preceded with selfintroduction and an explanation on the purpose and ethical aspects of the study. This was important in the establishment of rapport with the respondents.

### 3.5.2 Focus group discussions

The focus group discussion was conducted as a follow-up to the data collected using the standard questionnaire in order to reach a consensus on the gender perspectives from the point of view of the teacher trainees. Data concerning issues on gender disparities in education, the teacher training curriculum and challenges for males and females in teacher training was generated. The discussion was guided by themes of the research.

### 3.5.3 Key informant interviews

Semi-structured interviews were conducted to generate data regarding professional and institutional frameworks and their bearing on teacher training. The data collected was to substantiate information gathered from
the other methods. The informants used were people knowledgeable and relevant to the institutional and the social aspects of the college. A dean of students was interviewed and she provided information on the gendered social characteristics of the students and the training environment. The dean of curriculum provided data on the gendered academic qualities of the students as well as the teacher training curriculum.

### 3.5.4 Direct Observation

This method was used to generate data on the social and physical facilities during use by the student teachers as well as assess the participation of males and females in the activities. The method was also useful in assessing interactions between male and female teacher trainees during the focus group discussions.

### 3.6 Problems encountered

A number of limitations were faced in the course of fieldwork. To start with, the availability of the respondents proved to be problematic as the research timing coincided with teaching practicum for the students in the second year of study. This meant that the researcher had to wait till late in the evenings for respondents to be available to take part in the research. In addition to this, the respondents had to take their time off revising for the continuous assessment tests which were to begin in the course of the following week.

Being the beginning of the academic year, getting the first years to get involved in the study proved impossible and unnecessary since just a few were fully registered in college, another group was still in the process of reporting and registration, while another was yet to report for the second intake. Establishing their actual enrollment was therefore not possible. Involving them in the research would not give credible data since they were yet to get assimilated into the teacher training course.

As a result of all the activities in the college, getting key informants was a bit difficult and the researcher had to carry out the interviews as they went on with their respective duties. However, the researcher turned the situation to her advantage to make observation on aspects that could be of benefit to the study.

All in all, the researcher was impressed by the hospitality accorded by the students as well as the administrative, academic and support staff.

### 3.7 Data Processing and Analysis

Both the qualitative and quantitative data was collected. Quantitative data was coded, entered into spreadsheets analyzed using the Statistical Package for Social Scientist (SPSS). The statistical analysis performed was put into percentages and frequencies These established the characteristics and distribution of data. Qualitative data was manually organized and presented descriptively in form of themes. This method was used to explain explicitly the unfolding patterns
of the data collected. The arising implications were triangulated to give comprehensive gender perspectives.

### 3.8 Ethical Considerations

The researcher adhered the code of ethics in conducting the research. The respondents were clearly explained the aim of the research and participation was allowed after their consent. Privacy and confidentiality was explained and followed all through the research period. To ensure anonymity, the research tools did not have a requirement for identification of the respondents.

The study did not experience any ethical problems since the data collected was not sensitive in nature. The researcher also, prior to the study obtained a letter of introduction from the university to carry out the research.

## CHAPTER FOUR

## GENDER RATIOS IN SCIENCE AND ARTS DISCIPLINES

### 4.1 Introduction

This chapter discusses the investigation and documentation of gender ratios in science and arts departments as stated in the first objective. The number of student teachers in their second year of study in the science and arts department is recorded and disparities identified. Gender composition of academic staff members in the two departments is highlighted. The gender dimensions of the social demographic characteristics of the respondents are examined and the relationship with enrollment in the science and arts disciplines established. In discussing the gender dimensions of the social demographic characteristics of the respondents, aspects such as age, marital and social economic status of the respondents are investigated.

### 4.2 Gender Ratios in Science Arts Departments

4.2.1 Enrolment of male and female students in the science and arts disciplines

Enrolment as a variable was important in determining the composition of the student population in terms of gender as well as its significance in the subject of specialization. Males made up the majority of those pursuing science subjects. This was because $88 \%$ of the male students respondents ( $\mathrm{N}=50$ ) indicated that they were the majority and only $6 \%$ indicated that lemales were the majority, while $6 \%$ did not respond. Female students on the other hand $(\mathrm{N}=50)$, had similar responses with $88 \%$ indicating that males were the majority, $6 \%$ pointing out the temales and another $6 \%$ giving no response. This is shown in table 4.1.

|  | Males |  | Females |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Frequency | $\%$ | Frequency | $\%$ |
| Males majority | 44 | 88 | 44 | $88 \%$ |
| Females majority | 3 | $6 \%$ | 3 | $6 \%$ |
| Not stated | 3 | $6 \%$ | 3 | $6 \%$ |
| Total | 50 | $100 \%$ | 50 | $100 \%$ |

Table 4.1: majority in science department
The figures indicated in the table above are a reflection of what the dean of curriculum explained to be a result of the general enrolment trend in the college. Males were the majority since facilities in the college were that more males than females could be accommodated based on bed capacity. Further elaboration on disparities indicated that the same gender ratios were maintained when students specialized in either art or science disciplines during their second year of study.

In the science (which includes mathematics) department, there were 191 males and 164 females enrolled, while the arts department had an enrollment of 190 males compared to 164 females. The enrolment in the respective departments was usually based on individual performance in science and mathematics in the mid-course exam often taken at the end of the first year. Those who perform well in the sciences enrolled to take up science subjects and the rest took up arts. To ensure fairness, a quota-based on the general enrollment- for each gender was maintained.

### 4.2.2 Staffing in arts and science departments

Staffing was an important aspect in bring out the gender perspective in the college as it enabled the review of its contribution to the teacher training gendered environment. With 22 members of staff in the science department, only $31.8 \%$ were females while the males made up $68.2 \%$. The arts department had more males than females with $57.1 \%$ and $42.9 \%$ respectively. The professional and languages (English and Kiswahili) subjects were core courses that all teacher trainees were expected to study. In this area, there was gender parity in staffing with each gender making up 50\% of the total members of academic staff teaching the subjects. This is shown in Chart 4.1 below.

Chart 4.1: Staffing by gender in science, arts and core subject departments


The chart above indicated that there were gender disparities in the academic staffing in the college. Male staff members made up a larger proportion than females in both the science and arts departments although this was not attributed to any factors within the institution, since the Teachers' Service Commission's head quarters was responsible for the recruitment and promotion of college tutors. This could however be a reflection of the situation at the national level.

### 4.2 Demographic characteristics of respondents

### 4.3.1 Age

Age was a variable of importance in the study because age influences gender relations, entitlements, resource allocation, responsibilities, expectations and life situations of male and female teacher trainees.

Chart 4.2: Age distribution by gender


As indicated in Chart 4.2 above, one hundred male and female respondents took part in the survey. The analysis of the data collected indicated gender differences in terms of age. For instance, 19 years old were all females and these made up $2 \%$ of the total number of respondents. Respondents aged between 20 years and $26 \%$ were $82 \%$ with females making up $39 \%$ while males made up $43 \%$. Those between 27 and 31 years made up $11 \%$ of whom females were $9 \%$ and males $2 \%$. The remaining $5 \%$ were males who had not stated their age.

From this data, it is noticeable that more males belonged to the younger age group though a number did not indicate their age. Females on the other hand had a larger number than that of males in the older category, an indication that they enrolled in college at a more advanced age than men. However, it was noted that only females consisted of the youngest category, 19years.

Age also had implications on the marital status of female and male respondents. Females aged 24 years and above made up $40 \%$ of the total female respondents while male respondents belonging to this age group made up only $30 \%$. Out of the female percentage, $32 \%$ were married while 8\% were unmarried, compared to $10 \%$ of the males being married and $20 \%$ being unmarried. This data indicates that a larger number of females than male respondents were married at the college, thus reflecting an aspect related to the economic status of this category of females in the discussion that follows.

### 4.3.2: Marital status

From the data collected, a trend relating marital status of respondents with enrollment in arts and science departments emerged. For instance, of the 50 female students in the survey, $32 \%$
of them were married and out of these, $26 \%$ were taking arts while $4 \%$ sciences as their areas of specialization. In comparison to the males, only $12 \%$ of the 50 were married and $10 \%$ of these were taking sciences and $2 \%$ arts as their area of specialization.

|  | Males |  |  | females |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
|  | Frequency | percentage | Frequency | percentage |  |
| Married | 6 | $12 \%$ | 16 | $32 \%$ |  |
| Unmarried | 44 | $88 \%$ | 34 | $68 \%$ |  |
| Total | 50 | $100 \%$ | 50 | $100 \%$ |  |

Table 4.2: Marital status

The analysis of this data on table 4.2 above, indicates that more females than males were married and among this category, more females than males were taking arts while more males than females were taking sciences. The remaining $68 \%$ of the females in the survey sample were unmarried while the males in the unmarried category were $88 \%$. Gender disparities within this category with regard to enrollment in the science and arts departments could be identified. For example, while males made up $38 \%$ of the students pursuing sciences, females were only $28 \%$. In the arts department, $28 \%$ were females while $38 \%$ were males. This implies that marital status influenced the enrolment of females in the science and arts disciplines.

### 4.3.3 Economic status and dependants

Economic status and dependants were important providing a linkage between the sociological aspects of gender with the enrollment as determined by financial abilities and responsibilities of the teacher trainees.

Of the married females $(\mathrm{N}=16)$ in the sample, $75 \%$ had their fees paid by the spouse, $12.5 \%$ by CDF/sponsor and guardian/parent each. On the other hand, the married males ( $\mathrm{N}=6$ ) , 83.3\% had fees paid by parent/guardian and $16.7 \%$ by self. The number of females responsible for their own fees payment was $6 \%$ of the $(\mathrm{N}=50)$ in comparison to the males who were $14 \%$. Females benefiting from CDF or sponsorship were ( $\mathrm{N}=50$ ) $12 \%$. Males only had $9 \%$ receiving the same kind of funding and none of the married benefited. Married females faced greater challenges due to dependants with $50 \%$ of them experiencing fees problems, $25 \%$ suffering lack of concentration, $18.8 \%$ facing demand at home and $6 \%$ without dependants but still suffered fees problems. The married males had 50\% experiencing fees problems, $16.67 \%$ faced lack of concentration, and $66.67 \%$ experienced demands at home and $16.67 \%$ facing other family conflicts as a challenge. Several of the respondents experienced multiple challenges.

Of the married females, $75 \%$ had children as dependants while $60 \%$ males of the same category had a spouse as a dependant. The unmarried teacher trainees had fewer dependants who were mainly siblings ( $6 \%$ for females and $4 \%$ for male respondents) and children $2 \%$ for females and 4\% males. This showed that the economic status of the individuals in the survey had a bearing on their enrollment and performance as well as their marital status.

The data presented indicated that both male and female teacher trainees faced a great challenge in payment of fees. Married females received lesser support form their parents/guardians than their male colleagues who continue to receive support from parents/guardians despite their marital status. There was also a variation emerging with regard to other challenges facing the teacher trainees. For instance, females were more affected by lack of concentration than males who were more affected by demands at home. Nevertheless, quite a number of both genders faced multiple challenges resulting from their social-economical status.

### 4.4 Summary

From the discussion in this chapter, various aspects of gender with regard to enrolment have been presented. To begin with, more males than females were enrolled in science and arts discipline owing to the general enrolment ratios that have to tally with the quota for each gender based on bed capacity, in favour of males. Staffing trends also indicate that males made up the majority among the academic staff although technicalities related to staff deployment was not the mandate of the institution but the Teachers' Service Commission.

There is a relationship between social demographic characteristics and enrolment in science and arts disciplines. For instance, age as variable showed that females enrolled for the teacher training course at a more advanced age than males. This had a connection to the fact that more females than males were married. For the married females, spouses were responsible for the payment of college fees, unlike the males whose parents and guardians continued financial support beyond marriage. Females and males faced similar challenges with regard to fees
payments due to dependants. Both sexes also faced multiple challenges during their training. Finally, it was noted that more females had children as dependants while males had more dependants as spouses. Between the two categories, there was an element of single parenthood since a number of unmarried student teachers had children as dependants.

It is therefore imperative that although enrollment in the two disciplines was influenced by external factors such as centralization of resource allocation other internal gender factors played a part as discussed above.

## CHAPTER FIVE

## TEACHER TRAINING CURRICULUM AND ITS IMPACT

### 5.1 Introduction

This chapter discusses the findings for objective two, which examines the teacher training curriculum and its impact on male and female teacher trainees' professional and personal orientation. A comparison between the two genders is made regarding the implications of their pre-training attitudes, interest on performance progress, and satisfaction with the teacher training course. Factors related to the curriculum and their effects on professionalism and personal growth are highlighted. In addition, training focusing on gender needs is also discussed.

### 5.2 Academic Performance

| Performance | Males $\mathrm{N}=50$ |  | Females $\mathrm{N}=50$ |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Frequency | Percentage | Frequency | Percentage |
| Excellent | 8 | $16 \%$ | 6 | $12 \%$ |
| Good | 33 | $66 \%$ | 23 | $46 \%$ |
| Average | 9 | $18 \%$ | 21 | $42 \%$ |
| Poor | 0 | $0 \%$ | 0 | $0 \%$ |
| Total | 50 | $100 \%$ | 50 | $100 \%$ |

Table 5.1: Course performance by gender

Performance was an important aspect of training as it could be used as an indicator of skill acquisition and satisfaction with the teacher training course. The findings of the study with regard to the performance of males and females had variations.

Out of the 50 male respondents who took part in the study, $16 \%$ indicated excellent performance, $66 \%$ was good, while $18 \%$ had average performance. The females $(\mathrm{N}=50)$ on the other hand, had $12 \%$ being of excellent performance, $46 \%$ good and $42 \%$ of average performance. For both genders, none posted poor performance (Table 5.1)

|  | Males $\mathrm{N}=50$ |  | Females $\mathrm{N}=50$ |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Frequency | Percentage | Frequency <br> Percentage |  |
|  | 44 | $88 \%$ | 45 | $90 \%$ |
| Fairly important | 5 | $10 \%$ | 5 | $10 \%$ |
| Not important | 0 | $0 \%$ | 0 | $0 \%$ |
| Not stated | 1 | $2 \%$ | 0 | $0 \%$ |
| Total | 50 | $100 \%$ | 50 | $100 \%$ |

Table 5.2: Value accorded to studies by respondents in terms of gender

There was positive attitude towards the course with $88 \%$ of the males saying that their studies were important and $10 \%$ as fairly important. The females had $90 \%$ and $10 \%$ viewing their studies as important and fairly important respectively. Males had $2 \%$ not responding and none of both genders said that their studies were not important. This is indicated on table 5.2 above.


According to the opinion of a majority in the focus group discussion, a student's performance was highly dependent on the attitude one had, regardless of whether one was male or female. Both sexes were capable of doing well in whatever field of study they undertook. Further emphasis was that females in the institution were doing much better in the fields that were previously male dominated. In the view of the dean of curriculum, females' performance was equivalent to that of the males within the college.

There was also a strong opinion that socialization influenced the pursuance of certain goals and tasks. Role models and various forms of reinforcement contributed greatly towards attitude formation. The attitudes were responsible for the variations in females' poor performance in sciences.

### 5.3 Course Interest among respondents

|  | Males |  | Females |  | Cumulative |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Frequency | $\%$ | Frequency | $\%$ | frequency | $\%$ |
| Wanted course | 12 | $12 \%$ | 19 | $19 \%$ | 31 | $31 \%$ |
| Course unwanted | 38 | $38 \%$ | 31 | $31 \%$ | 69 | $69 \%$ |
| Total | 50 | $50 \%$ | 50 | $50 \%$ | 100 | $100 \%$ |

Table 5.3: Course interest by respondents

Among all the respondents ( $\mathrm{N}=100$ ) involved: only $12 \%$ of the males and $19 \%$ of the females in the survey had prior interest in pursuing the teacher training course. Males who were not interested in the course from the outset made up $38 \%$ of the respondents, while females were
$31 \%$ (shown on table 5.3 above). This was an indication that primary teacher training was more of a career of choice for the female students than the males. This implied that the respondents still maintained the view that teaching, especially at the primary school level was a feminine career.

Among those who had taken up primary teacher training out of personal interest, 50\% of the males and $78.9 \%$ females cited good career prospects, $25 \%$ males and $5.3 \%$ females identified advice, $25 \%$ males and $5.3 \%$ females indicated academic strength and $5.3 \%$ females and no males identified family influence as the reason they got interested in primary teacher training. More females than males felt that the teacher training course offered good career prospects but were more influenced by the external factors like family. Male teacher trainees on the other hand, had more interest in the course out of factors such as academic strength and advice unlike the females and showed that they were more independent minded than the females.

The motivating factor among 66\% male respondents was a liking for the course while females were $78.9 \%$. Family interest was the next choice with $16.7 \%$ and $15.8 \%$ respectively. Teachers as a motivating factor had $8.3 \%$ males and $5.3 \%$ females. $8.3 \%$ of the male respondents felt that they did well in the course hence were motivated, although no female felt this was a motivating factor to take up the course. Similarly, male students considered good performance as a motivating factor, unlike the females who did not. Family had an almost similar influence on the motivation for both the male and female respondents, while liking for the course had variations between males and females.

With regard to course satisfaction, $58 \%$ of the males and $21 \%$ of the females were satisfied with the course, $47 \%$ males and $57 \%$ females were fairly satisfied, while $21.05 \%$ of the females and none of the males were dissatisfied with the course. More males than females were satisfied with the course whereas more females than males felt fairly satisfied. Female were the only ones who expressed dissatisfaction.

Table 5.4: Motivation and level of satisfaction with course and progress

|  |  | Males $\mathrm{N}=12$ |  | Females $\mathrm{N}=19$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Frequency | \% | Frequency | \% |
| y interest | Good career prospect | 6 | 50\% | 15 | 78.9\% |
|  | Advice | 3 | 25\% | 1 | 5.3\% |
|  | Academic strength | 3 | 25\% | 2 | 10.5 |
|  | Family bias | 0 | 0\% | 1 | 5.3\% |
| divation | I like the course | 8 | $\begin{array}{\|l} \hline 66.7 \\ \% \\ \hline \end{array}$ | 15 | 78.9\% |
|  | Family interest | 2 | $\begin{array}{\|l\|} \hline 16.7 \\ \% \\ \hline \end{array}$ | 3 | 15.8\% |
|  | Teacher | 1 | 8.3\% | 1 | 5.3\% |
|  | I do well in it | 1 | 8.3\% | 0 | 0\% |
| urse sfaction | Satisfied | 7 | $58.3$ | 4 | 21.05\% |
|  | Fairly satisfied | 5 | $\begin{aligned} & 41.7 \\ & \% \\ & \hline \end{aligned}$ | 11 | 57.9\% |
|  | Not satisfied | 0 | 0\% | 4 | 21.05\% |
| gress sfaction | Satisfied | 6 | 50\% | 12 | 63.16\% |
|  | Fairly satisfied | 5 | $\begin{aligned} & 41.7 \\ & \% \\ & \hline \end{aligned}$ | 6 | 31.58\% |
|  | Not satisfied | 1 | 8.3\% | 1 | 5.26\% |

Note: percentages may not add to 100 percent, as multiple responses were possible

Males and females satisfied with the progress they were making in the course comprised of $50 \%$ males and $63.16 \%$ respectively, while $41.7 \%$ males and $31.58 \%$ females were fairly satisfied with their progress, and $8.3 \%$ males and $5.26 \%$ females were not satisfied. This is shown on table 5.4.

The data presented shows that more females than males were satisfied with the progress they were making in the course. However, more males than females were fairly satisfied although both sexes expressed dissatisfaction with the progress they were making.

Table 5.5 Preferred courses by respondents

|  |  | Males $\mathrm{N}=38$ |  | Females $\mathrm{N}=31$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | $\%$ | Frequenc <br> y | $\%$ |  |
| Preferred <br> course | Business field | 4 | $10.5 \%$ | 8 | $25.8 \%$ |
|  | Health field | 7 | $18.4 \%$ | 12 | $38.7 \%$ |
|  | IT/engineering | 6 | $15.8 \%$ | 3 | $9.7 \%$ |
|  | Law/architecture | 5 | $13.2 \%$ | 2 | $6.5 \%$ |
|  | Degree | 4 | $10.5 \%$ | 2 | $6.5 \%$ |
|  | Not stated | 12 | $31.5 \%$ | 5 | $16.1 \%$ |
| Why settle <br> for un <br> wanted <br> course | Lack of options | 5 | $13.2 \%$ | 4 | $12.9 \%$ |
|  | Course <br> unavailability | 3 | $7.9 \%$ | 7 | $22.6 \%$ |
|  | Entry <br> requirements | 16 | $42.1 \%$ | 6 | $19.3 \%$ |
|  | Cost | 10 | $26.3 \%$ | 13 | $41.9 \%$ |
|  | Not stated | 4 | $10.5 \%$ | 1 | $3.2 \%$ |

[^0]Those who had taken the course though not as their first course of preference identified their preferred areas of interest as the business field with $1.5 \%$ males and $25.8 \%$ females, 18.4\%males and $38.7 \%$ females in the health fields, particularly nursing, $15.8 \%$ males and $9.7 \%$ females in IT and engineering. Law/architecture had $13.2 \%$ males and $6.5 \%$ females. Arts and education degree courses attracted $10.5 \%$ males and $6.5 \%$ females (illustrated on table 5.5).

The emerging trend in the data discussed above shows that females and males were still attracted to traditionally feminine and masculine career paths. For instance, more males preferred IT and engineering; and law and architecture than females while the medical field, particularly nursing, and business attracted more females than males. The degree programmes had fewer females than males because females did not show as much enthusiasm as males in their performance for admission.

### 5.4 Gender Responsive Teacher Training

Respondents taking part in the survey were of varying opinions with regard to training that enabled them to deal with different needs of boys and girls while in the field. For instance, 62\% of both males and females indicated that there was some focus on gender at the college level, while males and females unaware of the gender focused training made up $16 \%$ and $20 \%$ respectively. Another 20\% of the males and $16 \%$ of the females indicated that there was no gender training while $2 \%$ of each category did not respond. Reference is on Table 5.6 below.

|  | Males $\mathrm{N}=50$ |  | Females $\mathrm{N}=50$ |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Frequency | Percentage | Frequency | Percentage |
| Yes | 31 | $62 \%$ | 31 | $62 \%$ |
| Not aware | 8 | $16 \%$ | 10 | $20 \%$ |
| No | 10 | $20 \%$ | 8 | $16 \%$ |
| Not stated | 1 | $2 \%$ | 1 | $2 \%$ |
| Total | 50 | $100 \%$ | 50 | $100 \%$ |

Table 5.6 Gender awareness training

Among those who said that there was gender training, 16\% of the males and $39 \%$ of the females were satisfied with the level at which it was performed while $68 \%$ males and $45 \%$ of the females were fairly satisfied, while16\% of both categories were not satisfied with the training (shown on table 5.7).

|  | Males N=31 |  | Females N=31 |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Frequency | Percentage | Frequency | Percentage |
| Satisfied | 5 | $16 \%$ | 12 | $39 \%$ |
| Fairly <br> satisfied | 21 | $68 \%$ | 14 | $45 \%$ |
| Not <br> satisfied | 5 | $16 \%$ | 5 | $16 \%$ |
| Total | 31 | $100 \%$ | 31 | $100 \%$ |

Table 5.7: Satisfaction with gender awareness training

Variations occurring in the assessment of the data presented could mean that the training to meet the gender needs of male and female students had some inconsistencies thus an indication of the need for a more elaborate gender focused training for the teacher trainees.

Among those who were unaware and those who said that there was no gender training, 100\% said that it was necessary and mandatory that it be made part of the teacher training course. However, according to the key informants, there was some form of gender sensitization done during student counseling sessions and talks. Guidance and counseling department with reinforcement from the gender committee was responsible, although this was done at the institutional level with the Ministry of Education being responsible for initiating gender committees. The tutors on the other hand received gender sensitization during training workshops.

According to one key informant, gender as an area of study was not elaborately incorporated into the teacher training curriculum, although there was a feeling that the establishment of a gender committee to be developed into a department in future, would probably translate to the incorporation of gender as an aspect of the teacher training curriculum. As far as the curriculum was concerned, gender specific training skills and knowledge were left to the discretion of the tutors who were expected to give inputs when they deemed it necessary.

### 5.5 Summary

Data analysis shows a variation in the way teacher trainees respond to their performance hence their attitude towards the content of the teacher training curriculum. Females for instance tended to exhume less confidence in their capability, thus have a larger number than that of males' acknowledging to be of average performance. A student's performance was highly dependent on the attitude one had, hence variations in performance of males and females.

Teacher training course was not a popular choice for most; these would have instead preferred pursuing the traditionally gendered careers. Therefore, female teacher trainees had a larger number of those who had considered primary teaching as a career of choice than the males.

The teacher training curriculum was not gender responsive and if there was any, it was left to the discretion of the college tutors. The college however, had through the Ministry of Education taken steps to incorporate gender training through the establishment of a gender committee that worked in conjunction with the guidance and counseling department to create gender awareness among teacher trainees and staff. This however, was not elaborately done and its contextualization into the classroom teaching was inadequate.

## CHAPTER SIX

## CHALLENGES TO GENDER RESPONSIVE TEACHER TRAINING

### 6.1 Introduction

This chapter deals with objective three which seeks to determine the challenges to gender responsive teacher training. These include aspects in the college that consider gender at all levels in the training of teachers. Opinions of male and female students with regard to factors that discourage performance of the minority in the science discipline and initiatives that encourage performance of females in the institution are discussed. The maternity leave policy is also explored to bring out the gendered opinions on issues of concern.

### 6.2 Factors discouraging participation of minority in sciences

Participation and the influencing factors were important in discerning the challenges to gender responsiveness, as enrolment and performance in sciences for both males and females were affected.

The respondents were asked whether there were factors that discouraged the minority from participating in sciences. Females and males who reported discouraging factors were $78 \%$ and $80 \%$ respectively whereas $20 \%$ of each gender were either not aware or reported none and $2 \%$ females did not respond. Table 6.1 below illustrates this.

|  | Females $\mathrm{N}=50$ |  | Males=50 |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Frequency | percentage | Frequency | percentage |
| Yes | 39 | $78 \%$ | 40 | $80 \%$ |
| Not aware | 1 | $2 \%$ | 3 | $6 \%$ |
| No | 9 | $18 \%$ | 7 | $14 \%$ |
| Not stated | 1 | $2 \%$ | 0 | $0 \%$ |
| Total | 50 | $100 \%$ | 50 | $100 \%$ |

Table 6.1: Discouraging factors for minority in sciences

Many males and females in the survey felt that there were discouraging factors and a number identified multiple factors. This is shown on Table 6.2 below

Table 6.2: Respondents' views on discouraging factors for minority in sciences

|  | Females N=39 |  | Males N=40 |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Frequency | $\%$ | Frequenc <br> $y$ | $\%$ |
| Negativity towards <br> sciences | 34 | $87.1 \%$ | 33 | $82.5 \%$ |
| Peer pressure | 17 | $50 \%$ | 12 | $30 \%$ |
| Parent preferences | 6 | $17.6 \%$ | 4 | $10 \%$ |
| Discriminative education <br> system | 4 | $10.3 \%$ | 3 | $7.5 \%$ |
| Policy bias | 6 | $17.6 \%$ | 7 | $17.5 \%$ |
| Cultural factors | 3 | $7.7 \%$ | 4 | $10 \%$ |

Note: Percentages may not add up to 100 percent, as multiple responses were possible

Respondents who felt that negativity towards sciences was the major factor that discouraged the minority from participating in sciences were, $87 \%$ females and $82 \%$ males, $50 \%$ females and
$30 \%$ males pointed out peer pressure and $17.6 \%$ females and $10 \%$ males attributed the state of affairs to parental preference. Discriminative education system and policy bias had each 10.3\% and $17.6 \%$ females, and $7.5 \%$ and $17.5 \%$ males respectively. Cultural factors identified by $7.7 \%$ females and $10 \%$ males.

The implications of the study results were that negative attitudes were the factors that had the greatest influence, while peer pressure had a moderate influence. Other factors such as culture, parental preference, discriminative education system and policy had a role to play.

An additional argument with regard to the education system was there was no gender balance from a general perspective. However, others opinions were that, whereas in some geographical areas there was gender balance at the primary school level, some areas had girls still disadvantaged and boys were disadvantaged in other areas. Culture and other sociological aspects played a role. There were no disparities in the allocation of resources at primary school level, although disparities existed in some areas due to socialization and culture, thus keep children of particular sex out of school. Most schools in the rural areas were ill equipped and the situation was worse in girls' secondary schools. This could be used to explain the lack of facilities to ensure gender equality in the enrollment of females in the teacher training institution.

### 6.3 Initiatives to encourage performance of females in the institution

The college had measures in place to encourage performance of females in the teacher training course as indicated by $72 \%$ of the females and $66 \%$ of the males, However, $26 \%$
females and $28 \%$ males were in disagreement. Those who did not state their opinion were $2 \%$ females and 6\% males. This is indicated on table 6.3 below.

|  | Females N=50 |  |  | Males N=50 |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
|  | Frequency | percentage | Frequency | percentage |  |
| Yes | 36 | $72 \%$ | 33 | $66 \%$ |  |
| No | 13 | $26 \%$ | 14 | $28 \%$ |  |
| Not <br> stated | 1 | $2 \%$ | 3 | $6 \%$ |  |
| Total | 50 | $100 \%$ | 50 | $100 \%$ |  |

Table 6.3: Presence of initiatives to encourage females' performance

Those who felt that the institution had initiatives that encouraged females' performance identified multiple measures that had been put in place. For example, $25 \%$ females and $54 \%$ males said that awarding of best performers was an initiative while 30\% females and $30.3 \%$ males identified special recognition. Scholarships for best performers were identified by $86.1 \%$ of the females and $60 \%$ of the males (illustration is on table 6.4 below).

Table 6.4: Specific initiatives to encourage female performance

|  | Females $\mathrm{N}=36$ |  | Males $\mathrm{N}=33$ |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Frequency | $\%$ | Frequency | $\%$ |
| Awarding best performers | 9 | $25 \%$ | 18 | $54.5 \%$ |
| Special recognition | 11 | $30.6 \%$ | 10 | $30.3 \%$ |
| Scholarship for best students | 31 | $86.1 \%$ | 20 | $60.6 \%$ |

Note: Percentages may not add up to 100 percent, as multiple responses were possible

Though respondents identified measures meant to encourage female students' performance, the said measures were generally for all students. These measures nevertheless ended up encouraging females to perform better. According to the dean of curriculum, there was no gender specific action to encourage females' performance because, the fewer numbers in the science department was as a reflection of the general enrollment that was in favour of men. The key informant argued that female performance in sciences was said to be equivalent to that of males, thus there was no need for affirmative action.

The bulkiness of the teacher training curriculum was said to have negative effects on participation of females in sciences since they were the most affected by external gender roles related to social economic factors. Moreover, there was also the feeling the specific subject training offered was so shallow that if one decided to advance, he/she began at the same level with those who had not undergone any training after form four. This had a demotivating factor to both male and female teacher trainees.

### 6.4 Maternity leave policy

|  | Females $\mathrm{N}=50$ |  | Males $\mathrm{N}=50$ |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Frequency | Percentage | Frequency | Percentage |
| Yes | 38 | $76 \%$ | 37 | $74 \%$ |
| No | 11 | $22 \%$ | 11 | $22 \%$ |
| Not stated | 1 | $2 \%$ | 2 | $4 \%$ |
| Total | 50 | $100 \%$ | 50 | $100 \%$ |

Table 6.5: Opinions for maternity leave policy review

As indicated on table 6.5 above, the need to review the maternity leave policy was supported by $76 \%$ females and $74 \%$ males. The respondents in support of this view said that the period should be reduced comprised of $36 \%$ females and $48.6 \%$ males. Those of the opinion that student mothers should be allowed to become non-residents to enable them nurse the baby and continue with their course consisted of $63.1 \%$ females and $54.1 \%$ males.

Another opinion was that mother friendly facilities be put up in college with $26.3 \%$ females and 24.3\% males supporting this line of thought. Other opinions of $7.9 \%$ females and $5.4 \%$ males ranged from having male student fathers taking responsibility by being included in the leave policy, the pregnant student being allowed to decide at what point of the pregnancy period she wished to take leave and need for more sensitization and understanding be accorded to student mothers and pregnant females. This is shown on table 6.6.

Table 6.6: Recommendations for maternity policy review

|  | Females N=38 |  | Males N=37 |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Frequency | percentage | Frequency | percentage |
| Reduce period | 14 | $36.8 \%$ | 18 | $48.6 \%$ |
| Become a non- <br> resident | 24 | $63.1 \%$ | 20 | $54.1 \%$ |
| Mother friendly <br> facilities | 10 | $26.3 \%$ | 9 | $24.3 \%$ |
| Others | 3 | $7.9 \%$ | 2 | $5.4 \%$ |

Note: Percentages may not add up to 100 percent, as multiple responses were possible

According to a key informant involved in the study, not much option was left for review since once a student was detected to be pregnant through palpating, she was expected to begin leave. However, the department concerned with student welfare noted insensitivity, as
sometimes student mothers would resume studies only to leave very young babies at home. In turn, this affected their studies and it was thus in the discretion of the department concerned to pro-long the period the student stayed in college before leave to enable her spend a longer time with the child after birth. This was however based on humane understanding. Student mothers faced a greater challenge as a result because they had to leave their young children at home for a period of three months each term for the two years of the training.

On the other hand, there was a feeling that the maternity leave policy needed no review and $22 \%$ of each sex shared this view. Another 2\% females 4\% males did not indicate their opinion on the matter. The general opinion by the student teachers and key informants was that it was not possible since the course was progressive and one could only continue from where she left. In addition, the current policy had the aim to discourage pregnancy during the two-year period of the course.

### 6.5 Summary

This chapter brought out facts that there were factors that impeded on the performance of the minority (females) in sciences at all levels of education. The major factor identified was the negative attitude toward sciences especially by females. Peer pressure, parental/family influence, education system and biased policy in addition to culture and socialization.

Discriminatory resource allocation in basic education i.e. secondary and primary schools was also identified as the basis of the situation that spread further into the higher levels of education. The variations in opinions between genders could be a reflection the influence of socialization.

The college seemed to lack gender specific measures to encourage participation of females a situation referred to as gender blindness. However, general measures to encourage good performance ended up working in favour of females, as the measures benefited them as well as the males. Gender disparities in enrolment originated from college enrollment that was based on bed capacity, since facilities in the college supported more male teacher trainees than females, hence fewer female ratios.

The maternity leave policy posed a challenge to both the institution and female student teachers. The policy meant that female students had to put on hold their studies for a period of one year, with the implication that they could not complete their studies at the same time with males and females enrolled in the same class. The institution did not have control on guidelines governing the policy as well as the structure of the curriculum that expected continuity after leave. This meant that the student mothers could only resume studies at the same time of the year they took leave, to ensure continuity.

The curriculum structure that meant that students undertaking the teacher training course were resident in the college for three months per term and three terms per academic year, meant that students who face the college fees challenge were further burdened by boarding fees, and they could not opt to cut the costs by being non-residents. For those with families, there was a greater challenge as they had to put aside their responsibilities at home thus affecting concentration in their studies.

## CHAPTER SEVEN

## CONCLUSIONS AND RECOMMENDATIONS

### 7.1 Conclusions

The purpose of the study was to investigate gender perspectives in the training of teachers at Igoji Teachers' Training College. Issues concerning gender ratios in the science and arts departments, the impact of teacher training curriculum as well as challenges that face gender responsive teacher training were probed. The objectives that guided the study were to investigate and document gender ratios in the arts and science disciplines, to examine the current teacher training curriculum and the impact it had on the personal and professional orientation of the teacher trainees and also to determine the challenges to instituting gender responsive teacher training programmes. In order to collect the baseline information, questionnaires, focus group discussions, key informant interviews and direct observation were employed. Guided by the findings in chapter 4,5 and 6, the following conclusions can be drawn from this study:

- The number of males and females enrolled for the primary teacher training course vary and there were more males than females enrolled at Igoji Teachers' Training college. The same trend was reflected in the enrollment of the males and females in science and arts disciplines during the second year of study where specialization occurred.
- The social dynamics and academic resources were responsible for gender variations in enrollment at the college. Igoji teachers training college had more facilities to support the enrollment of males than that of females, hence the differences in gender enrollment. The academic staffing in the college also showed that there were more males than females in
both the arts and science departments, although the core courses had an equal number of both genders.
- Social demographic factors had a bearing on the enrollment in science and arts departments. Marriage for instance seemed to have an influence so that majority of the married females were enrolled in the arts disciplines than the unmarried females and male. This could be because of the fact that they had not performed as well as the unmarried females in sciences, in the mid course examination used as a basis for selecting those to specialize in the subject. The social economic factors and dependants influenced enrolment since both affect the performance especially in sciences. Attitudes of student teachers towards their performance, the course and progress affected their acquisition of skills and knowledge to be effective teachers in future.
- The teacher training curriculum had differential impacts on the teacher trainees' personal and professional orientation. Although not a career training of choice for substantial number of the students, a large number perceived the course as important and in turn their performance was good. However, there was variation with regard to gender and females had a slightly different view that they were average performers, which could be interpreted to be an issue of self confidence rather than capability resulting from socialization and other factors.
- The teacher training curriculum lacked elaborate training to equip teacher trainees with skills and knowledge to deal with different needs of boys and girls in classroom teaching. However, gender sensitization occurred at the college level, as the Ministry of Education had spearheaded the establishment of a gender committee to deal with the gender needs
of the students. Tutors were also left to their discretion to handle gender needs at the academic level whenever they deem necessary.
- The teacher training syllabus was wide to a point that student teachers felt that the duration for the course was too short and the content covered was shallow, thus making the certificate awarded not of much value if one was to pursue further studies in the area. The feeling therefore, was that the course offered little room for personal development in future as one often receives the same consideration with those who had not undertaken the P1 course:
- There were a number of challenges facing gender responsive teacher training at Igoji Teachers' College: the teacher training curriculum was controlled from the Ministry of Education and the institution had to abide by the decrees set, and the much that could be done was limited.
- The maternity leave policy for student mothers was also under the control of the Ministry of Education. The female students affected were at a disadvantage since they had to put aside their studies to resume after delivery. The main reason given for this was that the curriculum was progressive and one could only continue from where she left. The institution could do very little to be sensitive to the plight of the students by prolonging their stay on basis of human understanding to allow the mother a longer stay with the child after delivery.
- The lack of a gender policy at the institutional level had resulted to lack of gender-focused measures to deal with students' academic needs from a gender perspective. This explains the lack of measures to promote performance of females especially in sciences.


### 7.2 Recommendations

The findings of this study have been applied to develop the possible recommendations that could be implemented to ensure a gender responsive environment and training for future primary school teachers at Igoji Teachers' Training College. The following recommendations were therefore suggested:

- There was need for further research into all primary teacher training colleges in the country to get an elaborate national gender perspective in primary teacher training.
- Gender studies needed to be made a core subject in teacher training to be enable teachers once in the field deal with gender issues at the classroom and school levels. Teacher training also needed to take into account gender differences to be able to deal with performance issues that affect student teachers due to the negativity acquired during the formative years of learning.
- Igoji teacher training college needs to put in place a gender policy to enable deal with emerging gender issues in the training of teachers at the institutional level as well as deal with social cultural aspects affecting students who come from diverse backgrounds.
- The teacher training certification needs to be in such a way that it promotes personal and professional growth thus encouraging the certificate holder to build onto what has been acquired during the course without having to start a fresh in a related area of study.
- Establishing a mentorship programme at the college level is necessary to be able to deal with negativity towards sciences as well as contribute to confidence building especially among female teacher trainees.


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## Appendix 1

## Work Plan

The study is expected to run through a period of two months as follows. Observation of facilities during use by students will take place concurrently with other activities of the study.

| Duration | Activity |
| :--- | :--- |
| August | Preparation |
| September $7^{\text {th }}$ to 13th | -Data collection |
| $7^{\text {th }} \& 8$ th | -Questionnaire administration |
| $9^{\text {th }} \& 10$ th | -Interviews |
| $11^{\text {th }} \& 12$ th | - Focus group Discussions |
| September $14^{\text {th }}-28^{\text {th }}$ | Data analysis and report writing |

## Appendix 2

## UNIVERSITY OF NAIROBI MASTER DEGREE RESEARCH PROJECT

## QUESTIONNAIRE FOR MALE AND FEMALE STUDENTS

The research is towards the fulfillment of the requirements for the award of a Masters of Arts Degree in gender and development studies. The objective of the research is to help identify disparities and challenges in primary school teacher training at Igoji College. As a student, your views on diverse issues pertaining to your current and past experiences will be highly appreciated. Kindly, take a little of your time fill in this questionnaire as honestly as is possible. The information given will be treated with utmost confidentiality.

## Personal information

Sex Male [ ] female [ ]
Age $\qquad$
Marital Status married [ ] unmarried [ ]
Area of Study Arts [ ] Sciences [ ]
Year of Study: first year [ ] second year [ ]

## Background information

1. What would you say is the social economic status of your family?
$0)$ lower class [ ]
1) middle class [ ]
2) upper class [ ]
2. who pays your fees
1) Self [ ]
2) parents/guardian [ ]
3) spouse [ ]
4) sponsor/bursary/CDF [ ]
3. Do you have any dependants?
1) Yes [ ]
2) no [ ]
a) If yes, who? 1) Children
3) sibling
4) spouse
5) others (specify)
b) What challenges do you face as a result?
6) Demands at home
[ ]
7) Lack of concentration in studies [ ]
8) Problems in fee payment [ ]
9) Others (specify) $\qquad$

## Academic information

4. How would you rate your performance in academic work?
5) Excellent [ ]
6) Good [ ]
7) Average [ ]
8) Poor [ ]
5. How important do you regard your studies?
0) not important [ ]
1) fairly important [ ]
2) important [ ]
6. Is the course you are taking what you wanted to study?
1) Yes [ ]
2) no [ ]
a) if yes
i. What made you interested in this course?
3) Advice [ ]
4) good career prospects [ ]
5) academic strength in the area [ ]
6) family bias [ ]
7) any other (specify)
ii. What motivated you to study this course?
8) I like the course [ ]
9) My teacher influenced me into it [ ]
10) My family wanted me to do it [ ]
11) I do well in it [ ]
12) Others (specify) $\qquad$
iii. Are you satisfied with this course?
13) Satisfactory [ ]
14) Fairly satisfactory [ ]
15) Unsatisfactory [ ]
iv. Are you satisfied with the progress you are making in this course?
16) Satisfactory
17) Fairly satisfactory
18) Unsatisfactory
b) If not
i. What had you hoped to study?
ii. What made you to settle for a course you did not want to study?
19) Lack of other options
20) Lack of advice
21) Unavailability of the course I wanted [ ]
22) Failure to meet the entry requirements [ ]
23) Any other reason (explain)
7. Is there training to enable one to deal with different needs of boys and girls pupils in the primary school environment?
1) Yes [ ]
2) no [ ]
a) If yes how well do you think it is done?
3) Satisfactory [ ]
4) Fairly satisfactory [ ]
5) Unsatisfactory [ ]
b) If no do you find it necessary
6) Yes [ ]
7) no [ ]
8. Who make up the majority of those in science classes?
1) Males [ ]
2) Females [ ]
9. Are there factors that discourage the participation of minority in science courses offered in the college?
1) Yes [ ]
2) No [ ]

If yes, which ones (tick all that apply)

1) policy bias[ ]
2) discrimination of girls in the education system ..... [ ]
3) cultural factors ..... [ ]
4) negative attitudes towards science oriented courses ..... [ ]
5) parents preferences ..... [ ]
6) peer pressure ..... [ ]
7) other factors (specify)
10. Are you aware of any initiatives to encourage performance of females in this institution?
1) Yes[]
2) No [ ]
11. If yes which ones? (Tick all that applies.)
1) awarding best performers [ ]
2) special recognition [ ]
3) scholarships for best students [ ]
12. Do you think that the maternity leave for pregnant female students needs to be re-addressed?
1) Yes []
2) No []
13. If yes, how should it be addressed (tick all that applies)
1) Reduction of the one year period
2) Be allowed to continue nurse the baby as a non-resident [ ]
3) Mother friendly facilities be put up in college [ ]
4) Any other (specify)

## Appendix 3

## Interview guide for the Dean of Students

1. What is your opinion on gender balance in this institution?
2. Does the institution show any commitment towards achieving gender balance?
3. Are there any gender training programmes for the staff and student teachers?
4. Do students receive any gender sensitive skills as part of their course? If so to what level?
5. Do men and women have an equal chance in participating in decision making in this institution?
6. How is male /female leadership perceived in the institution?
7. How do males and females relate to/with each other in the institution?
8. What is your opinion of the current teacher trainee maternity leave practice?
9. Do women consider themselves as capable as men?
10. Who are most comfortable to deal with, male or female students?

## Appendix 4

## Focus group discussion guide for male and female students

## Gender ratios

1. What is your opinion concerning gender balance /equality in education?
2. Does the education system provide an equal opportunity for the participation of both males and females?

## Training Curriculum

3. Comment on the notion that girls/women or male/boys are good at specific tasks.
4. Can females perform as well as males science and arts?

## Challenges

5. Who face the greatest challenge in the teaching profession, males or females?
6. Are there conditions in the college that are not conducive to either males or females?
7. What are the unique challenges facing females in the college?
8. What are the unique challenges facing males in the college?
9. What are the unique challenges facing students with families?
10. How in your opinion can these challenges be overcome?
11. Which pupils are more comfortable to deal with, girls or boys?

## Appendix 5

## Interview schedule for the Dean of Curriculum

1. What is the actual enrolment in terms of gender?
2. What are the actual number of staff in terms of gender in the arts and science department?
3. Do students receive gender sensitization skills as part of their professional training i.e. the teacher training curriculum?
4. How would you rate male and female performance in arts and science subjects?
5. Are there any strategic measures by the Ministry of Education to mainstream gender in the teacher training curriculum?
6. How would you rate females' enrollment in the science department?
7. Is there any affirmative action aimed at encouraging females' enrollment and performance in sciences?

[^0]:    Note. Percentages may not add up to 100 percent, as multiple responses were possible

