# Staff Distribution by Gender and the Effect on Learners own Academic Potentials among Secondary Students in Uasin Gishu County, Kenya

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#### **Abstract**

Gender disparity in performance in national examinations, over the years, has raised many questions, which can only be answered through research. The purpose of the present study was to determine the staff distribution by gender and effect on learners own academic potentials amongst students in mixed public secondary schools in Uasin-Gishu County. A survey research design was used for the purpose of investigating relationships between variables. The selection of the sample was done by stratified random sampling technique while the schools were selected through proportionate stratified sampling technique. A 29-item questionnaire on students' perception was administered to a total of 272 participants. Data was collected through the use of questionnaires and document analysis. Descriptive statistics such as the means, frequencies and percentages were used in data analysis. The study established that there was gender differentiation in the staffing of departments in school, an issue that promoted gender inequality in the enrolment and performance of students in various subjects; teachers assigned differentiated responsibilities to male and female students therefore promoting gender inequality perceptions. The study recommends that teachers promote gender equality amongst students in assignment of responsibilities.

**Keywords:** Development, Education, Equity, Gender, Teachers

#### Introduction

The Millennium Declaration in which world leaders, Kenya included, unanimously adopted at their September, 2000, United Nations (UN) Summit, represented a vision for improving the lives of the world's people. The UN agencies and other international organizations defined eight distinct Millennium Development Goals (MDGs) and attached to them, a series of quantifiable and time-bound targets and a set of indicators for tracking progress. The third MDG is that of promoting gender equality and empowering women (Collymore, 2005). Consequently, the Kenyan government through various policy statements and the entrenchment of gender issues in the constitution has made attempts towards gender equity

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and poverty eradication. Both boys and girls are given equal opportunities in school and compete fairly for the few employment opportunities. In 2015 the Sustainable Development (SDGs) goals were adopted with the hope that it will propel development further.

Therefore, education should be seen as a specialization process by which individuals are prepared to take up their respective positions within a social setting. Indeed, education is recognized as a tool for achieving social mobility. Knowledge, values and attitudes and skills acquired through this process, should be able to better the individual's environment, at whatever level, and enhance their survival chances (Masiga, 1994).

Challenging the issues of sexism in schools is of crucial importance, especially when we consider that a person's early experiences can be vital in determining her or his later attitudes and expectations. Weiner (1985) points out factors that contribute to sexism in schools. It is argued that children are born into a sexist society, where women do not have equal opportunities and therefore, girls and boys have different experiences and expectations of themselves, which are formed by society's attitudes as to what is appropriate for girls and boys. Weiner (1985) further argues that "these attitudes lead to male and female stereotyping. There is a strong pressure on both sexes to conform to these stereotypes even if they lead to conflict in their own lives".

The female stereotype holds that girls and women are passive, nurturing, emotional and impractical. The characteristics of male stereotype are activity, aggression, dominance and technical proficiency. Female exclusion from science and technology, even if it is apparently by girls' own choice, also means that, as citizens, their ability to understand and control their environment will be limited (Whyte, 1985). Nevertheless, most schools feel they are already providing equal opportunities by neutral treatment of the two sexes (Bloomfield, 1984). In effect ignoring the effects of gender in this way merely reinforces stereotyping because it does nothing to challenge the definition of certain aspects of the curriculum as masculine or feminine.

Teachers are faced with the challenge of identifying common experiences of discrimination against girls. There is also need for practical ideas of offering girls equality through own teaching and working on projects that deliberately raise and challenge the issue of sexism. (Weiner, 1985). A survey of teachers' attitudes on equal opportunities in Britain schools revealed that men were more likely to be opposed to promoting equal opportunities than women but that differences in subjects taught were more important than the sex of the teacher (Whyte, 1985).

The conditions for a girl-friendly school may be more difficult to bring about, for it would seem that teachers must be openly and visibly concerned about equality before pupils will change their choices; schools with traditional norms, limited or formal communications channels, with few women in senior positions will be much slower to adapt to changed female expectations" (Whyte, 1985:90)

Chege et al (2006) observed that the teachers' influences at school have been found to be a hindrance to girls opting for science and mathematics. Studies have shown that teachers tend to carry the societal expectations of girls into the school, and therefore treat boys differently from girls. Some teachers are said to actually discourage girls by uttering statements such as "mathematics and science are not meant for girls" (Wamahiu et al., 1992 in Chege et. al., 2006)

Frith and Mahony (1994) point out how it is much harder to elicit reasonable behaviour from pupils who perceive one (teacher) to be of low status. "This is part of a much wider problem

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to do with how boys (and perhaps some girls, too) perceive women, outside of the exceptional power relationships within the classrooms and any action should certainly attempt to address the wider issue through work with pupils as much as with adult members of any society " (Frith and Mahony, 1994:70).

Gender issues have continued to play a key role in the formulation of public policy, not least in the education sector, where the gender gap in many developing countries remains a challenge (Sifuna and Chege, 2006). It is, however, important to understand the process of policy formulation because it is crucial to the final outcome of its implementation. In contemporary educational theory and practice feminist thought provides invaluable direction on gender policies that seek to enhance inclusiveness and equality in education (Sifuna and Chege, 2006). The Sessional paper NO 1 of 2005 Points out the support and implementation of affirmative action in secondary education to address the needs of the marginalized and/or those in difficult circumstances and the need to ensure that the school environment is gender and special needs education responsive.

Sifuna et al (2006), however, points out how education policies reveal the absence of comprehensive gender policy with specific Monitoring and Evaluation guidelines. Further, the Kenyan Government hardly provides effective guidelines on how to ensure that schools are, not only, learner-friendly, but also, that they ensure that girls are made to feel safe at school. Further, unless the policies are explicit on girls' educational needs, the gender gap would continue to be skewed in favour of the boys.

There is therefore need to address gender issues within the broader policy concerns and in the context of the global focus of EFA, the MDG's and other international conventions and treaties that advocate equal education for every person.

Some key international treaties according to Chege et. al (2005) include:

- The international Convention on Civil and Political Rights (ICCPR) which was adopted in 1966 and came into force 10 years later in 1976, albeit with a limited coverage of gender and education issues.
- The Convention on the Elimination of all Forms of Discrimination against Women (CEDAW), which was developed specifically with gender in mind and adopted in 1976.
- The Convention on the Rights of the Child (CRC) that was adopted in 1989 and came into force in 1990.

Although in full support of the MDG's, the Ministry of Education's statements of objectives of education are gender neutral. The Kenyan Education system aims to;

"Improve quality of human life by imparting knowledge which will enable individuals to be self-reliant ..... the education system aims at removing social injustices and disparities between sexes, regions, social and economic groups. It also aims at preparing the youth to realize their full potential and practice the norms and values of society. In other words the basic guiding philosophy in education has remained that of producing individuals who are properly socialized and who possess necessary skills, attitudes and values to participate positively in nation building" (GOK National Development Plan: 1994-1996: 215-216).

The philosophy of education as stated above, is also spelt out in Sessional Paper No. 10 of 1965 of African socialism and its application to planning in Kenya which calls for political equality human dignity, social justice and equal opportunities for all citizens (Masiga, 1994). Based on the philosophy of equal opportunities for all citizens, the broad educational policies reiterate the national goals of education which state that: education should promote social

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equality and foster a sense of social responsibility within an educational system which provides equal educational opportunities for all (boys and girls, men and women).

Among the activities that the Kenya government planned, to help in the elimination of all discrimination of women and girls included improvement of the learning environment of the girl child with particular reference to reduction of workload, with due attention to curriculum relevance and empowering learning materials. (Masiga, 1994)

Efforts towards gender equity are emphasized in Sessional Paper No. 1 of 2005. Gender equity is taken care of under the theme of social responsibility, which is a broad philosophy of education. 'Education and training therefore seeks to offer equal opportunity to all learners (GOK, Sessional Paper No. 1 2005:23). Under the broad goals, education aimed at eliminating regional and gender disparities in primary and secondary education by 2005.

The government current initiatives through the Kenya Education Sector Support Programme (KESSP) 2005- 2010 include:

- Expansion and improvement of classrooms, boarding facilities, water and sanitation facilities to create conducive and gender responsive environments particularly in ASALS (Arid and Semi-Arid Lands)
- Girls empowerment through participation in school management, Tuseme 'speak out' programme, child rights clubs membership and capacity building on HIV/AIDS, life skills, sexual maturation and the its management.
- Construction of schools for girls, equipping laboratories to improve girls' performance in science and use of school cluster approaches for in service training of teachers and school managers in child centered and gender responsive education.
- Advocacy for girls' education through community mobilization campaigns; media, role modeling and establishment of centers of excellence for girls.
- Community empowerment, mobilization and sensitization on inhibitive cultural practices to girls' education, for example child labour, FGM and early marriages.
- Affirmative action for girls/women to access further training e.g. in post school education and training opportunities, award of bursaries and scholarships. (GOK, KESSP 2005-2010:224-225)

The current gender policy on secondary Education gives much priority to girls in single sex schools than their counterparts in mixed schools. The policy in part states thus "To address girls' lower participation, the Government as provided grants to some girls schools and is currently implementing an affirmative component in award of bursaries" (GOK, 2007), National Gender Policy on Education)

# Research Methodology Research Design

The researcher adopted a survey research design in investigating the relationship between the aspects of hidden curriculum and gender equality. Survey research design was used to determine the current status of the phenomenon under study.

# **Target Population**

In this study the target population consisted of all secondary school students in the 71 mixed public secondary schools in Uasin Gishu district. The accessible population was the selected students in sampled mixed schools in the seven divisions. All the respondents were either day scholars or boarders. The respondents in selected schools engaged in co-curricular activities

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apart from pursuing their academic studies. The respondents comprised of all students from form one to form four in the selected schools.

# Sampling

Proportionate stratified sampling technique was used to select 21 schools from the seven divisions namely; Soy, Turbo Kaptagat, Kesses, Kapsaret, Ainakboi and Moiben. The sample was drawn from 21 schools spread across 7 divisions. The 21 schools represent the 30% of the 71 mixed public secondary schools in Uasin-Gishu District. The following Table 3.0 shows the proportion of schools that were selected in each Division.

#### **Data Collection Instruments and Procedure**

The researcher used questionnaires and document analysis as the main tools for collection of data. Due to the large sample size (272 respondents), the questionnaire proved most useful method of collecting the data. The researcher also examined the schools' organization charts or school hierarchical structures to determine staff distribution. The two instruments were very helpful in shedding light on pertinent issues.

Data was collected from participants in selected secondary schools using questionnaires and document analysis. The questionnaire was used because the respondents were required to make reports on their own perceptions of the school organization, processes and expectations.

# **Data Analysis**

The researcher first established if all the questionnaires were duly completed. The data was then coded using the Statistical Package for Social Sciences (SPSS). The researcher used descriptive data analysis procedures. Data was presented in tables and charts. The researcher grouped data from questionnaires (SPQ) according to subscales and responses and determined their frequencies and percentages.

#### **Discussion of Findings**

# **Staff distribution and Students Academic Potentials**

The researcher studied the staff distribution in mixed public schools to determine if it had any effect on the learners' perceptions of their own academic potentials. The researcher supplemented the questionnaire with document analysis of school charts in order to get more accurate results of the occupants of various positions in the school. Posts identified included; Headteacher, Deputy Headteacher and Director of Studies. The heads of the following departments were also identified: Language, Mathematics, Science, Technical, Humanities, Guidance and Counseling, Careers and Extra-curricular. The sections that follow clearly indicate the findings.

#### 1. Schools' Staffing Hierarchy

By use of document analysis, the researcher managed to establish that male teachers headed 20 schools while a female counterpart headed only one. Male teachers therefore formed a total of 95.2% while female Headteachers accounted for 4.8%. Within the deputy headship positions, a total 17 male deputies were noted as compared to 4 female deputy Headteachers. The male deputies therefore formed 80.94% compared to 19.06% represented by women. The Director of Studies post posted similar results as that of the Deputy Headteacher with 17 males compared to 4 females forming 80.94% and 19.06% respectively.

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Men also dominated the mathematics department with 18(85.71%). Heads of Department as compared to 3(14.29%) female heads. Also notable were the Science, Careers and Extracurricular departments with 13, 14 and 20 male heads as compared to 8, 7 and 1 female heads respectively.

It was also established that the women dominated the Language, Humanities and Guidance and Counseling Departments with 14, 17 and 17 female heads as compared to 7, 4 and 4 male heads respectively. The Table 1 below clearly illustrates the findings.

TABLE 1
Summary of Staffing Hierarchy

	HEADS OF DEPARTMENTS													
NO OF POSITIONS	GENDER	H/ TEACHER	D/HEAD TEACHER	DIRECT- OR OF STUDIES	LANG- UAGE	MATH	SCIE	TECH- NICAL	HUMA- NITIES	GUIDANCE AND COUNSELING	CAREERS	EXTRA- CURRICULAR	тот	
21	M (%)	20 [95.2]	17 [80.94]	17 [ 80.94 ]	7 [ 33.33 ]	18 [ 85.71 ]	13 [60.8 ]	9 [42.86 ]	4 [ 19.06 ]	4 [ 19.06 ]	14 [66.67]	20 [95.2]	143 [ 61.90]	
	F %	1 [4.8]	4 [19.06]	4 [19.06 ]	14 [ 66.67 ]	3 [ 14.29]	8 [ 39.2]	12 [ 57.14 ]	17 [ 80.94]	17 [80.94]	7 [ 33.33 ]	1 [4.8]	88 [ 38.1 ]	
TOTAL	21	21	21	21	21	21	21	21	21	21	21		231	

#### **Gender of Respondents' Class Teacher**

The researcher obtained information about the class teacher of respondents to establish whether there was gender equality in allocation of this responsibility to the teachers. It was found out that majority of respondents had their class teachers as female with 139 (52.1%) affirming this claim. The remaining 128(47.9%) indicated male class teacher. The following table clearly outlines the frequencies of respondents by gender of their class teacher.

The female teacher features in her involvement with the students' academic work. The researcher therefore made the conclusion that the class teacher in most cases is female while the school manager is male. Gender relations within the school system therefore had the male teacher in a superior position while the female teacher occupied a subordinate position. The study captured the students' academic achievement in their end of term two examinations using the students' perception questionnaire. The respondents were asked to indicate their scores. The Table 2 presents the findings.

Table 2
Academic Achievement of Respondent by Gender.

Students' Academic Achieveme nt	ENG		KIS		MATHS		GEO		CRE		HIST			CHEM		BIO		PHY		AGR		USIN SS TUDI S
	М	F	M	F	М	F	М	F	M	F	М	F	М	F	М	F	М	F	М	F	М	F
Excellent (70-100%	14	17	25	31	16	7	23	2 1	14	17	38	3 6	16	11	15	11	14	5	27	1 9	30	14
Very good (61-69%)	25	41	50	50	21	8	37	2	25	41	34	3 4	22	13	35	27	16	1 0	20	2 8	24	22

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Total	13 9	12 5	13 9	12 9	13 5	12 7	10 1	9	13 9	12 5	13 6	9	134	12 3	127	12 3	103	6 7	82	8	102	18 7
Below average (41%andb elow)	40	22	10	3	61	79	13	5	40	22	4	8	59	65	36	42	38	4	7	9	15	15
Satisfactor y (51-60%)	60	45	54	45	37	33	28	3	60	45	20	1 8	37	34	41	44	29	8	28	2 7	33	36

# **Academic Achievement in Languages**

The researcher observed that majority of students were taught by female teachers of English. These were 133 respondents compared to 102 taught by male teachers. It was also notable that majority of H.O.D's in that department were female. The researcher observed that female students were more likely to do well than their male counterparts in this subject. Out of the 31 who achieved an excellent grade in end term two examinations, 17 were female, while 14 were male. Those whose performance was rated as very good consisted of 41 females and 25 male.

Concerning Kiswahili, the researcher observed that majority of students, 44.9%, were taught by male teachers of Kiswahili, while those taught by female teachers, were 41.5%. Although the majority of heads of Language department were female, the researcher noticed that teachers of Kiswahili ranked high as school's deputy head teachers.

Although majority of girls achieved excellent grades in Kiswahili compared to their male counterparts, it is noticeable that the margin is not as wide as it is in English. Out 56 students who achieved excellent grades in Kiswahili, 31 were females, while 25 were male. On the 'very good' category, an equal representation of 50 against 50 was observed. Majority of males achieved satisfactory grades compared to females with 54 and 45 respondents respectively.

## Students' Academic Achievement in Mathematics and Sciences

The researcher noticed that majority of the students were taught by male teachers of mathematics. Majority of the Heads of Department were also male. A total of 168 respondents were taught by male teachers of maths as compared to 66 respondents taught by female teachers.

It was also established that majority of male students achieved high academic grades as compared to those of their female counterparts. Those respondents who achieved excellent scores consisted of 21 males and 8 females. The next category, graded as satisfactory consisted of 37 males compared to 33 females. The researcher learnt that, just as was the small number of female teachers of mathematics, majority of female students tended to perform lower than the male students. The study noted that there is a poor representation of the female gender in this department by the limited membership by teachers and low performance by the female students

The researcher observed that majority of these students were taught by male teachers of science. In all the three, sciences, namely biology, physics and chemistry, the researcher noted that the performance of girls always ranked below that of boys. Within the excellent grades for example, 16 boys emerged compared to 11 girls in chemistry. This trend was also replicated in biology wit 15 boys compared to 11 girls emerging in top grades. Physics was worst hit with 14 boys compared to 5 girls in the excellent category. The rest of the frequencies are illustrated in table 4.53 above shows how girls continue to under achieve in the three sciences.

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There was an insignificant number of female teachers of physics, the number of female students enrolled for physics was as low as 67 compared to 103 male students. Physics subject within the school system was viewed as highly masculine with majority of students and teachers being male. Although there was gender disparity in number of those who studied biology and chemistry too, it was less significant in biology.

#### Students' Academic Achievement in Humanities

The researcher noticed that although majority of heads of humanities were female, most students were taught by male geography teachers with 136 being taken by male teachers compared with 53 taught by female teachers. The researcher noted that geography could pass for an art as well as a science since it could be taught by a humanities teacher or a mathematics teacher. Majority of geography teachers also featured in school headship positions.

Concerning academic achievement of students, it was noticeable that majority of students did better than their female counterparts. Out of the 44 who excelled in end of term two examinations, 23 were male compared to 21 females. Among those whose performance was ranked as 'very good', 37 were male compared to 23 females. Majority of teachers of Geography were male, the researcher learnt that in the mixed school set-up the female teachers exuded less confidence in handling Geography, so did the female students.

The researchers observed that majority of the students in History and Christian Religious Education (CRE) were taught by female teachers. Also notable was the fact that majority of heads of Humanities Department were females. Of the total 197 respondents in the C.R.E category, 133 were taught by the females while 64 were taught by male C.R.E teachers. A total of 118 students were also taught by female history teachers.

When academic achievement in C.R.E is looked at, more female students did better than their male counterparts. Out of 71 who excelled, 41 were females compared to 30 males. The next category of 'very good' comprised of 37 female students and 31 males.

Performance in History and Government was more or less the same for male and female students. In the 'excellent' category 38 were male compared to 36 females. The next category 'very good' comprised of 34 males against 34 females.

The research findings above affirm that when girls worked with women, their academic achievement greatly improves sometimes even above that of boys as reflected in the performance in C.R.E. This argument is in line with the Ajaiyi's (1996) report where he affirmed from research findings that girls could perform better than boys when given an environment of powerful role models.

# Students' Academic Achievement in Technical subjects

The researcher noted that majority of students were taught by female teachers of Agriculture, 114 respondents compared to those taught by male teachers, 55 respondents. When it came to academic achievement, 27 males compared to 19 females, achieved an excellent grade. Of the 48 students in the very good category, 28 were females compared to 20 males. So, although agriculture is a technical subject, female students performed better than male students. The researcher also noted that there was gender parity in numbers of those students who opted to do or study agriculture. It was notable here that majority of students were taught by male teachers of Business Education. The researcher also noted that male students dominated the top grades compared to their female counterparts. Out of the 44 top students in this subject, only 14 female students featured, compared to 30 male students.

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Out of those whose grades were 'very good', 24 males, compared to 22 females featured. The researcher also noted that there was gender disparity in enrolment into the Business Studies subject. There tended to be a replication of the gender disparity in the staffing of this subject with that of student enrolment.

#### **Conclusions**

The study further established a gender differentiation in the staffing of mixed secondary schools with majority of male teachers taking up the Headteacher (95.2%), Deputy Headteacher (80.94%) and Director of studies (80.94) positions. Male teachers also managed the mathematics, sciences and extra curricular departments. Humanities, language and guidance and counselling departments were a domain of female teachers. Male students did well in the sciences and maths as compared to female students who faired well in

Languages and Humanities. In a nutshell, there is a relationship between the aspects of hidden Curriculum and the quest for gender equality in mixed Secondary schools. The gender inequality in representation in various cadres of school management and department is a strong reinforcement of gender inequality amongst the students.

#### Recommendations

- a) There is need for the creation of Equal Opportunities Commission (EOC) at the Ministry of Education in Jogoo House. This Commission would work to ensure that women teachers get equal opportunities in appointment to school management positions. The Gender Desk at the Ministry of Education must be decentralized and activated by placement of active and committed individuals, who would sensitize all Education Officers and Head teachers to work towards attainment of gender equality. This Commission would also work to ensure that deliberate efforts at the Ministry, as well as, at school level, are put in place to ensure equal opportunities, for teachers.
- b) The Teachers Service Commission could consider posting or deploying of female teachers of Mathematics, science and technical subjects to mixed schools so that appropriate role models are available to girls. This could go along way in shaping the interest and attitudes of these students towards the subjects in question.

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#### References

- Bloomfield, J. (1984) 'Option Scheme Management for Equal Opportunity'; Paper Presented at Girl Friendly Schooling Conference, Manchester Polytechnic.
- Chege, F., & Sifuna, D. (2006). Girls' and Women's Education in Kenya: Gender Perspective and Trends. UNESCO.
- Collymore Y. (2005) Gender Equality: New Opportunities for Moving Ahead. Washington: Population Reference Bureau.
- Frith, R., & Mahony P. (1994). Promoting Quality and Equality in Schools: Empowering Teachers through Change. London: David
- Government of Kenya. (2005). Kenya Education Sector Support Programme 2005-2010: Delivering Quality Education and Training to All Kenyans Nairobi. Government Printers.
- Government of Kenya (2005). Sessional Paper No 1 of 2005: A Policy Framework for Education, Training and Research. Nairobi: Government Printers.
- Masiga, E. (1994). "Gender Issues in the Teaching Profession". A Seminar Paper on The Proceedings of the Third Teacher Education Conference Held at Egerton University Njoro From The 5<sup>th</sup>-9<sup>th</sup> Dec. 1994.
- Whyte, J., Deem, R., Kant, L., and Cruickshan, M. (1985). Girl Friendly Schooling; London; Methuen and Co. Ltd.
- Weiner, G. (1985). Just a Bunch of Girls: Feminist Approaches to Schooling. Great Britain: Open University Press.