MUSTER

Multi-Site Teacher Education Research Project sponsored by DFID



Discussion Paper

14

Gender Gaps in Schools and Colleges: Can Teacher Education Policy Improve Gender Equity in Malawi?

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Lesotho
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South Africa
Trinidad &
Tobago



Multi-Site Teacher Education Research Project (MUSTER)

MUSTER is a collaborative research project co-ordinated from the Centre for International Education at the University of Sussex Institute of Education. It has been developed in partnership with:

- The Institute of Education, University of Cape Coast, Ghana.
- The Institute of Education, The National University of Lesotho.
- The Centre for Educational Research and Training, University of Malawi.
- The Faculty of Education, University of Durban-Westville, South Africa.
- The School of Education, The University of the West Indies, St. Augustine's Campus, Trinidad.

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MUSTER is focused on generating new understandings of teacher education before, during and after the point of initial qualification as a teacher. Its concerns include exploring how new teachers are identified and selected for training programmes, how they acquire the skills they need to teach effectively, and how they experience training and induction into the teaching profession. The research includes analytical concerns with the structure and organisation of teacher education, the form and substance of teacher education curriculum, the identity, roles and cultural experience of trainee teachers, and the costs and probable benefits of different types of initial teacher training.

MUSTER is designed to provide opportunities to build research and evaluation capacity in teacher education in developing countries through active engagement with the research process from design, through data collection, to analysis and joint publication. Principal researchers lead teams in each country and are supported by three Sussex faculty and three graduate researchers.

This series of discussion papers has been created to provide an early opportunity to share output from sub-studies generated within MUSTER for comment and constructive criticism. Each paper takes a theme within or across countries and offers a view of work in progress.

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	LIST OF ACRONYMS	
BRAC CDSS DEC DEO DFID	Bangladesh Rural Advancement Committee Community Day Secondary Schools Distance Education Centre District Education Office/Officer Department for International Development	
EFA FPE GABLE GAPS GER	Education for All Free Primary Education Girls' Attainment in Basic Literacy and Education Gender and Primary Schooling in Africa Gross enrolment ratio	
GTZ INSET JCE MCDE MIE	Gesellschaft fur Technische Zusammenarbeit Inservice Training/Teacher Education Junior Certificate of Education Malawi College of Distance Education Malawi Institute of Education	
MIITEP MoES&C MSCE MSSSP	Malawi Institute of Education Malawi Integrated Inservice Teacher Education Programme Ministry of Education, Sports and Culture Malawi School Certificate of Education Malawi School Support Systems Programme	
MUSTER PCOSP PIF	Multi-Site Teacher Education Research Project Primary Community Schools Programme Policy Investment Framework	
PSLC TDU TUM USAID	Primary School Leaving Certificate Teacher Development Unit Teachers' Union of Malawi United States Agency for International Development	

ABSTRACT

This paper will look at the potential role of initial teacher education in addressing gender inequities at different levels of the Malawian education system, and show how inequities at one level contribute to and reinforce inequities at other levels. My focus is on gender equity in the employment of teachers and teacher educators, although by discussing female teachers as role models, there is also some consideration of the promotion of gender equity in school achievement.¹ The research on which the paper is based was carried out as part of a study of primary teacher education in Malawi, which is itself a sub-study of the MUSTER² Project. The central argument of the paper is that as a result of the gender gap in education in Malawi, it is necessary to consider how teacher education policy might impact differently on women and men i.e. to mainstream gender in policymaking and implementation. The paper ends with a number of policy recommendations, which are as follows. Firstly, there is a need for more involvement of stakeholders in policy-making. Secondly, the entrance requirements for initial teacher education should not be raised and there is an argument for lengthening the residential component of training and providing more language support for teachers. Thirdly, more boarding accommodation should be provided for female teachers. Fourthly, support should be provided for teachers intending to upgrade their qualifications. Fifthly, there is a need for teachers' professional development to pay more attention to gender issues. Sixthly, qualified teachers with experience of implementing free universal primary education should be recruited as tutors in the training college and more opportunities for upgrading should be provided for college tutors.

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¹ I recognise that much of the school and college curriculum is gendered, even in the way that academic disciplines are constructed (Harris, 1997). I also recognise that the current structure of formal schooling is not above question; it seems too often to define young people as failures and serve to reproduce an elite, rather than help individuals and communities develop their broad potential (Serpell, 1993, 1999, Bloch and Vavrus, 1998). It is beyond the scope of this paper however, to address these issues.

² The MUSTER (Multi-site teacher education research) Project is a collaboration between the University of Sussex Institute of Education, and educational research institutes in Ghana, Lesotho, Malawi, South Africa, and Trinidad and Tobago.

1. INTRODUCTION

1.1 Introduction

Currently, recruitment into teaching and teacher education programmes is ostensibly based on merit, as the main entry criterion is a certain level of academic achievement. At first sight this may appear a fair system, however, treating men and women equally at the point of entry to teaching may not be just if they have not had equal access to the education through which they are being judged. In order to achieve gender equity, various measures may be needed to increase the contribution of women teachers to the education system. Increasing women's contribution is particularly important not only for the teachers themselves, but also because it is expected that they will have a role in breaking into the cycle of female educational underachievement, and thus reducing the gender gap.

Within the drive to provide Education For All (EFA) there are calls to improve access, quality and equity in primary education. The first two years of schooling, known in Malawi as the infant standards, have the worst facilities, the highest pupil/teacher ratios, and unsurprisingly, the highest dropout and repetition rates. Since most children do not survive in school beyond the early standards, and do not achieve basic numeracy and literacy, this paper focuses on lower primary education.

1.2 Concepts of equity

Equity is taken to mean equal outcomes from education and not only equal opportunity to access education. Gipps and Murphy give an overview of the development of various definitions of equality and equity and the movements with which they are associated. In Britain, the equal opportunities movement worked within existing educational structures, whereas the anti-sexist movement sought to challenge the status quo at a more fundamental level, aiming to 'transform the patriarchal and ethnocentric nature of school structures and curricula' (1994:10). The experience of implementation led to the combination of strategies from both these viewpoints.

It was in the United States that debate focused more on the concept of equity and its link to justice, which may require going beyond giving equal treatment to people. The concern with educational injustice done to population sub-groups (eg ethnic minorities and female students) led to compensatory education, but this may now have given way to a more individualistic perspective; 'Underachievement is once again the responsibility of the individual rather than the educational institution' (op cit:13). This 'blame the victim' approach denies the difficulties that groups of students face; seeing each individual case can mask solutions that could be found by studying larger-scale societal and global economic structures.

1.3 Indicators of gender inequity

The concept of equal outcomes and the use of educational achievement as an indicator of equity are also not straightforward. Formal schooling is to a greater or lesser degree competitive and aims to produce unequal results in examinations so that students can be selected for different educational pathways. This is perhaps particularly the case in developing countries, such as Malawi, with limited educational resources, where only a small percentage of the age cohort are chosen to continue their education at secondary level (Serpell, 1999). In using outcomes to judge gender equity in this kind of educational system, there should therefore be differences within groups rather than between groups of students (Levine cited in Gipps and Murphy, 1994). This may be judged in terms of educational achievement (formal examination results) as well as participation in education (enrolment figures and also regularity of attendance). Unequal outcomes between genders in formal examinations may have several sources. Murphy considers that it is important to distinguish between 'lack of achievement as an outcome of teaching and lack of achievement arising from a lack of opportunity to learn. It is also evident that the effects of psychosocial factors in assessment situations can mask students' actual achievements' (1995:259). Gipps considers this a fundamental question in equity and assessment.

...are group differences in measures 'real' or are they the result of the measuring system? The answer, of course, is likely to be 'a bit of both' and what we need to do is to minimise the latter, while understanding and articulating the causes of the former. (1995:280)

Where there are persistent differences between the two sexes in either participation or achievement data in a given sector of education, this is known as a gender gap (King and Hill, 1993). Gender disparity in enrolment, persistence in school, repetition rates, examination success, employment and promotion of teachers, are all possible indicators of inequity in an education system.³

1.4 Rationale for promoting gender equity

The role of education in society varies greatly in different research paradigms. Bloch and Vavrus (1998) provide a summary of the major paradigms, the theories derived from them, and their possible implications for women and education in sub-Saharan Africa. Much of the early research on gender and education in developing countries was sponsored by the World Bank, informed by the modernist human capital paradigm, and found that 'both the social and private rates of return to girls' primary education are high' (Swainson et al, 1998:4). Current policies in Malawi are largely informed by this neo-liberal instrumentalist approach, in contrast to which a rights-based approach might be considered an innovation. The presence of more women in the education system might allow space for the creation of educational alternatives that change the system and adapt it to women and their lives, rather than only

³ Definitions of education indicators can be found at www.unesco.org.

countering disadvantage by making the existing system more accessible to women. This paper, however, takes a conservative pragmatic standpoint, working from the existing system, analysing the effects of current policy proposals and making recommendations that assume evolution rather than revolution from the status quo.

I will first describe the context in which teacher education operates in Malawi. This will include looking at aspects of the schools and colleges, and comment on the proportion of infant teachers who are female, and the image of an infant teacher. In line with an agenda of mainstreaming gender, I will then consider the implications for women of a number of government policy proposals that aim to improve teacher education. Finally, I will discuss strategies for promoting greater gender equity in primary teacher education, including looking at women teachers' sense of agency over their own lives.

2. BACKGROUND

2.1 Teacher education in Malawi

Malawi is a suitable setting for considering these issues as it is currently undergoing large-scale teacher education reform with significant support from Western donors. Following the introduction of free primary schooling in 1994, the Ministry of Education in Malawi employed large numbers of teachers on temporary contracts, the majority of whom (over 17,000) were unqualified, (Kunje and Stuart, 1996). In order to expand the training capacity of the six teacher education colleges⁴, MIITEP (Malawi Integrated In-service Teacher Education Programme) was introduced in January 1997. Much of this programme is based on distance learning, undertaken by students who are teaching full-time. It therefore provides an interesting context in which to explore how teacher education relates to the classroom.

The stated aims of MIITEP specifically mention promoting greater gender equity in schools:

• promotion of greater educational achievement for girls through a 'gender appropriate curriculum'

Other aims include the:

- promotion of activity-centred pedagogy
- linking of teaching college materials 'more firmly to the classroom'

(Teacher Development Unit 1996:iii-vi).

'....Ultimately, MIITEP is expected to improve the quality of teaching and learning in primary schools in Malawi by reducing the number of untrained teachers in the system.' (Teacher Development Unit 1997:4)

2.1.1 Teacher recruitment and primary education quality

As noted above, there is a drive to increase the quality of primary education, which is widely perceived to have deteriorated following the extensive demands made on the system since the introduction of free primary education. There are a number of issues often raised by policymakers and other stakeholders in relation to school quality, that are of particular concern in rural schools, and that interrelate and sometimes conflict. These include the need to:

- increase teacher commitment to local area
- reduce teacher absenteeism
- provide and maintain secure good quality housing for teachers
- promote female teachers as role models, including higher status positions such as headteachers
- have better-qualified teachers
- have more mother-tongue instruction in lower primary

⁴ The structure of the initial teacher training course, (a short period in college followed by school-based study), means that the colleges can train three times as many teachers annually as before.

have smaller classes

Many of these issues relate to teacher recruitment, and teachers recruited from the local community are likely to have a number of advantages. For example, they will already have accommodation and will speak the local language. Female teachers will have family support and so may feel safer than they would in an unfamiliar area. They will have greater existing links with the local community, and this, together with the above factors may lead to less teacher absenteeism. ⁵. Local recruitment can however, conflict with the demand to recruit better-qualified people into the teaching force, because those who make it through secondary school are more likely to come from urban areas. The issues for teacher education are:

- 1) What should be the academic level of people selected for initial teacher education?
- 2) What school conditions should initial teacher education prepare teachers for?
- 3) How much should initial teacher education address academic upgrading?

2.2 Methods

This paper analyses data collected at various evels of the education system; schools, teacher training colleges, donors and the Ministry of Education and the Malawi Institute of Education (MIE) during five months of fieldwork between September 1998 and July 1999. My main research method was the semi-structured interview with various stakeholders in the education system. This is in line with Gaynor's comments on research on the supply, and professional development of women teachers:

Much of the research which might be of use to develop understanding of how women teachers' needs differ from their male counterparts, has used large-scale survey methods which fail to yield the kind of information required for appropriate action. It seems more advisable in general to adopt approaches which take the local culture into account and which use qualitative methods, including structured and unstructured interviews, participant observation and in-depth case studies. (1997:52)

⁵ Some headteachers argue that it is better for teachers to work in schools away from their village of origin, because then they will not have excessive community obligations placed on them that detract from their school work. (Demis Kunje, personal communication, July 2000)

Table 2.1: Summary of stakeholders interviewed

	Male	Female	TOTAL
Student teachers	5	19	24
Teachers college lecturers	5	5	10
Teachers	2	2	4
Headteachers	1	1	2
Ministry of Education officials		2	2
Donor agency officials	2	2	4
Malawi Institute of Education	4		4
officials			
Total	19	31	50

I taped interviews with 50 participants (most were interviewed more than once) as shown in table 2.1, and made written notes on shorter conversations with other stakeholders.

In the teacher education colleges I also worked with six focus groups of student teachers and one group of lecturers. My student sample (19 female, 5 male) was not representative of the male/female balance in MIITEP. Untrained teachers in primary schools were divided into six cohorts for MIITEP. Generally, priority to start the training course was given to the most academically qualified student teachers, and so these were allocated to the first cohort. The sixth and last cohort contained the least qualified student teachers on average, and due to gender gaps in Malawi's education system, this was also the cohort with the highest percentage of females. I conducted my fieldwork in colleges during the period when the sixth cohort was in residence, and there were therefore many female student teachers in my sample. One of the two colleges that I focused on was women-only, and so this further skewed my sample of student teachers towards women.

Interviews were conducted in English as this is used for teacher education, and all teachers are expected to be able to teach through the medium of English in the upper primary standards. Due to the low level of academic achievement of some students in English, they lacked confidence and communication was therefore sometimes stilted. In order to overcome this difficulty I used various means to support my communication with the student teachers. These included talking about drawings of teachers, discussing shared experience (their lessons that I had observed), using the terminology that they used, and working back from practice to theory.

In Malawi, I was a white foreigner, with all the baggage of history, consequent perceptions of power relations, and lack of shared assumptions that come with this. This was addressed throughout the research by involvement in the MUSTER Project. The research was designed in response to issues raised at the initial Project workshop by the Malawian lead researcher, with whom I liaised throughout the study. I also worked with a research assistant who was a local lower primary teacher. To address some of the possible relationship issues I worked in a small number of schools, and chose participants with whom it seemed possible that I would be able to build a rapport (this was a subjective judgement based on their confidence at our initial

meeting). I sometimes worked with groups as noted above.⁶ The participants in the research gave freely of their time and energy, and I hope that they found our conversations as interesting as I did.

A clear limitation to my research is my ability to understand and explain the complexity of the issues as a foreigner. In order to increase the chances of this I have included qualitative data and will use extensive quotation. I hope this will allow something of the voices of the Malawian educators to come through. Where possible I went back to participants and checked points with them in order to clarify my understanding of their previous comments.

There is very little research on Malawian infant classes, and in this situation, although I am an outsider to the Malawian education system, I consider that my involvement can be justified. I hoped that my experience as an infant teacher in the UK⁷, and as a teacher educator in Namibia for two-and-a-half years would to some extent counterbalance my foreign status. The teacher who worked with me as a research assistant, seemed as pleased as I was when we found out that we qualified in the same month of the same year. I suspect that talking to a woman rather than a man, may have been easier for the female teachers, and with the male teachers, gender may have lowered the status that came with being from 'outside' and from the university. I can only guess, however, at the interplay of race, gender, and occupational status.

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⁶ Groups alter the power dynamic of a meeting; for a start, the researcher is outnumbered. They also allow the possibility of the construction of a collective rather than individual view (Smith, 1999).

⁷ This experience was most useful in talking about pedagogy with teachers after lesson observations. Although pedagogy is not directly relevant to the discussions of their careers analysed in this paper talking about this over a number of months helped to build my relationship with the teachers.

3. CONTEXT

3.1 Brief description of the schools

At the school level, I am focusing on the first two standards of formal schooling, because many children do not make it past the lower standards of school, and the teaching and learning conditions are the most challenging in the whole school system;

...although children are entering school in vast numbers, and almost all children spend some time in school, many leave before they are likely to have obtained basic literacy and numeracy skills. Given the existing flow rates through the primary cycle, only one-half of children who start school will reach standard 3, and less than one-fifth will complete the primary cycle, with fewer girls than boys completing. (Kadzamira and Rose, 2000:10)

It is important therefore to make the most of the time the children are able to spend in school, at the same time as planning for improvements in persistence in the future.

For the case-studies I chose three schools within three hours' drive of the University of Malawi, Zomba, where I was based. Two of the three schools were ordinary state primary schools teaching Standards 1 to 8, known as full primary schools. The third was a lower primary community school, part of the state system, but set up with the help of the Primary Community Schools Programme (PCOSP)⁸. In one school the standard 1 class was always taught outside under a tree, unless there was heavy rain, in which case the headteacher would amalgamate higher standards to free a room for a combined class of Standards 1 and 2. In the second school, the three Standard 1 classes were combined during the rainy season, and taught together by three teachers in one room; sometimes over 200 pupils would be present. The children sat on the uncemented floors. The community school opened in 1997 and had good quality buildings.

Teaching and learning materials were scarce in the full primary schools, although all classes had a chalkboard and chalk. The teachers frequently referred to **pupil absenteeism** as the cause of teaching and learning difficulties. A feature of the pattern of attendance was that many children were absent one or two days a week. Clearly, this makes it difficult to plan teaching, and for children to make progress in their learning. Several teachers related poor attendance to high repetition and dropout rates. A further feature of class composition that compounds teaching and learning difficulties, is the **wide age range**. In one Standard 1 class the pupils were aged from four years to fourteen years.

⁸ PCOSP was funded by the UK government's Department for International Development. It provided funding for building at least three community schools in each of Malawi's 31 education districts. Innovative processes for involving local communities in the siting, building and running of the schools are a particular feature of this programme. The schools are part of the state education system, with minimal additional inputs in staff training and materials. A major aim of the programme was to see whether improvements in resourcing to the level the government would hope to provide (eg one textbook for every two pupils), and improvements in school management, would make a significant difference to pupil achievement.

3.2 Gender inequity

It is beyond the scope of this paper to describe gender inequities in Malawian society in general, although these are clearly reflected in the education system, which also functions to perpetuate them. Kadzamira and Chibwana, (2000) give details of the heavier non-academic workloads expected of girl pupils both at home and at school, discuss parents' belief that boys are more intelligent than girls, and describe practices that lead to earlier marriage for girls than boys. There are significant urban/rural differences, with the rural areas typically having more traditional patterns of gender-differentiated roles. For example, a female education official interviewed, thought that it would be much more difficult for a teacher with a young child to get the necessary family support to enable her to attend a residential training course, if she came from a remote, rural area rather than from an urban area. This would presumably be due to family expectations of her commitment to domestic duties.

The rest of this section will briefly describe the structure of the Malawian education system and note certain gender inequities within this system, from primary school through to teacher training college level, and also in the proportion of women employed as primary teachers in lower and upper standards. As noted above, gaps in participation and in achievement in education between females and males are indicators of gender inequity. Gender gaps in achievement result from differences in the way boys and girls are socialised, including their home and school experiences, rather than being due to inherent biological differences in cognition. Murphy comments on the sources of gender-differentiated performance as follows:

Psychosocial explanations have proved powerful because of the evidence from many studies that similarities in males' and females' performance far outweigh any differences observed for the majority of the population (1995:257).

A study in secondary schools in Malawi found that girls' performance in Mathematics and Physical Science improved significantly when they were taught in single-sex classes (Kadzamira and Chibwana, 2000), showing that social factors had accounted for their previous underperformance rather than a deficit in mathematical ability.

3.2.1 Gender gaps in school enrolment and achievement

At the most fundamental level, opportunities to learn may be more available to boys than girls. There is a significant gender gap in enrolment at primary school level, as figure 3.1 shows. At higher levels of the education system gender gaps continue, both in participation in schooling (enrolment) and in examination performance. From the first year of schooling onwards these interact, as entry to the next standard is dependent on success in the end of year examinations. Even those children who are formally enrolled may have little opportunity to learn; the heavy domestic duties for girls noted above can limit time for homework and may also lead to absenteeism, (Kadzamira and Chibwana, 2000).

Murphy (1995) describes several psychosocial variables that can account for gender differences in performance among those children who are in school. These include differentiated expectations and styles of interaction from families and teachers of the behaviour, abilities and activities of boys and girls. This socialisation leads to students' sex-differentiated self-images, levels of academic self-confidence and attitudes to school tasks and subjects.

Enrolment 1,800,000 1.600.000 1,400,000 1,200,000 1,000,000 800,000 600,000 400,000 200,000 82/83 83/84 86/87 87/88 88/89 89/90 90/91 91/92 92/93 93/94 94/95 95/96 84/85 85/86 80/81 81/82 Female -- Male

Figure 3.1: Primary Enrolment by Sex: 1980/81 – 1995/96

Source: Kadzamira et al, 1998

At the end of a minimum of eight years of primary schooling, pupils take the Primary School Leaving Certificate examination, (PSLC). This is used to select pupils for secondary schools. There are few places in state secondary schools, and entry is very competitive. Some students therefore continue their studies at private secondary schools, or at community day secondary schools (CDSS). The latter have recently been created by converting Distance Education Centres (see below). Even when all types of schools are included, secondary school enrolment remains one of the lowest in Africa with a gross enrolment ratio (GER) of 14% of girls of secondary school age enrolled, and 23% of boys (Draft Policy Investment Framework (PIF), 2000).

Tables 3.1a and 3.1b: Success at the MSCE examination by sex in 1997

Table 3.1a: Pass rates by sex and type of school

Type of school	Female pass rate	Male pass rate
Government/grant aided	25%	43%
Private	30%	37%
Distance Education Centre	4%	10%
All schools	17%	27%

Table 3.1b: Number of MSCE graduates by sex and type of school

Type of school	Number of females passing	Number of males passing	Female proportion of total successful candidates
Government/ grant aided	889	2917	23%
Private	636	1091	37%
Distance Education Centre	169	1061	16%
Total	1694	5069	25%

Source: Calculated from tables 3.7, 3.11 and 3.15, 1997 Basic Education Statistics.

After two years of secondary schooling pupils take the Junior Certificate of Education (JCE). This was the minimum qualification needed for employment as a primary school teacher until December 1999, when teacher recruitment advertising gave MSCE as the minimum academic requirement. After a further two years of study, pupils take the Malawi School Certificate of Education (MSCE), the current minimum entry requirement for teaching. Only a quarter of successful MSCE candidates are female, see table 2b.

3.2.2 Factors affecting female persistence in school

A number of the women teachers that I spoke to left secondary school before completing their courses due to pregnancy, marriage, or lack of school fees. These findings mirror those of a number of other studies, (eg Swainson et al, 1998, Kadzamira and Rose, 2000). Girls who became pregnant were, until recently, required by the authorities to leave school; current policy allows them to return to school in the term after the birth of their child, but according to Kadzamira and Rose (op cit), pregnancy directly accounts for only a small proportion of girls dropping out of school. Most drop out due to failing a standard, their labour being required at

home or in the labour market, marriage, or due to lack of money to pay for the direct costs of schooling such as clothing and stationery.

The structure of the educational system is hierarchical, and school pupils are treated as children, even if they are in their late teens or twenties. Their position in society determines their status rather than their age. Swainson et al (1998) discuss the possible effect of formal initiation to adult status (initiation ceremonies) on girls' persistence in school. Starting school later than the recommended six years, and the internal inefficiency of the school system, (frequent repetitions of a school year) mean that many primary pupils are in the difficult situation of being physically and socially adults while being treated as children in school. Kadzamira and Chibwana comment that 'Girls in particular are under intense pressure to leave school and get married after puberty' (2000:123). Even some of the teacher educators referred to the MIITEP trainees as pupils, 'We may expose a skill to the kids, to the students, sorry'. Although the trainees have been teaching for several years prior to becoming students, and are mostly in their mid-twenties or older, some teacher educators require student teachers to stand up when they answer a question in a seminar, presumably as a mark of respect.9

3.3 **Efforts to promote gender equity in schools**

There have been various efforts to promote gender equity in schools. The student teacher handbooks produced as part of MIITEP give the following rationale for their focus on gender:

The Government of Malawi is trying to achieve greater educational attainment for girls as this has an impact on the mortality and fertility rates thereby enhancing the economic and social well being of Malawians, improved food security and health status. (Handbook 4, 1997:iv)

This implies an instrumentalist, rather than rights-based ideology. Instrumentalism is also evident in the USAID rationale for increasing educational access for girls and as this helps them to 'serve their families and communities'. (www.info.usaid.gov, June 2000). Kadzamira and Rose comment that 'girls in particular have received attention in the formulation of policy, although this has, to a large extent, been a donor-driven agenda.' (2000:5). As part of the USAID GABLE programme, fee waivers were arranged for all non-repeating secondary girls. This has removed some, but not all, of the direct costs of schooling.

A recent large-scale study of gender and primary schooling was carried out by the University of Malawi Centre for Educational Research and Training, and the Malawian Ministry of Education, (Kadzamira and Chibwana, 2000). This report was one of the multi-country series of studies in the Gender and Primary Schooling in

⁹ The ambiguous nature of the teacher educator/MIITEP student teacher relationship is perhaps revealed by variations in this practice. Some teacher educators reminded students not to stand up in seminars when they started to do so, while another used this to describe the difference between teaching children and teaching adults (Stuart, personal communication).

Africa (GAPS) programme¹⁰ that has increased knowledge of the complex causes of gender inequity both inside and outside schools. For example, the authors report observing teachers treating boys more favourably than girls in classroom interaction. This has clear implications for teacher education and the aim of MIITEP stated above to provide a more 'gender-appropriate curriculum' is relevant here. In this case, curriculum needs to be understood in its broadest sense, including the 'hidden curriculum', and not just as a collection of syllabuses and textbooks.

Hopefully, the GAPS study (Kadzamira and Chibwana, 2000) will assist in the formulation of pragmatic policy. At least in the wording of national level documents, the aim to promote gender equity is already expressed. For example, the draft Malawi Policy and Investment Framework states the following: 'At the primary, secondary and tertiary levels the intention is to increase female participation to at least 50%' (2000: 1.5.4) although full strategies to achieve the stated aim are not clearly apparent.

3.4 Malawi College of Distance Education

The Distance Education Centres, (DECs), mentioned above, were the major part of the Malawi College of Distance Education, and have now been renamed community day secondary schools. The change in name recognised the *de facto* role, as additional secondary schools, that the DECs had been playing for some time. Although distance education in Malawi was originally intended to offer primary and secondary programmes by correspondence, almost all students enrolled for secondary subjects, and 86% of these registered to attend classes at the DECs (Education Basic Statistics 1997). Several of the teachers in my study had continued their education in this way after dropping out of formal education due to pregnancy and marriage. Almost 7,000 of the roughly 15,000 MIITEP trainees, have a JCE obtained through the DECs or other distance study mode (Kunje and Lewin, 2000). Some qualified teachers have upgraded themselves from JCE to MSCE while teaching, funding themselves through vacation courses run by the Teachers' Union of Malawi (TUM).

There are, however, serious quality concerns regarding the education the DECs/community day secondary schools provide. Pass rates are very low, and there is also a gender gap; for example a female MSCE pass rate of 4% in 1997, compared to a 10% male pass rate (see table 3.1a). Teacher educators, and others, frequently commented on the inadequate level of English and low general academic attainment of MIITEP trainees who had studied through the DECs. They attributed this to students being able to accumulate one or two subjects a year towards a JCE, so that they had forgotten the subjects they first studied. The quality of teaching in the DECs/day secondary schools is low, probably because they are mostly staffed by primary teachers without secondary level subject training, and pupil-teacher ratios are

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¹⁰ A collaboration between Forum for African Women Educationalists (FAWE), Ministries of Education and the Institute of Development Studies, Sussex

¹¹ The low academic level of student teachers has been seen as a particular weakness of the system resulting from the need to recruit large numbers of teachers since the introduction of Free Primary Education, however Nyirenda (1991) notes that even then the number of MSCE-graduates entering teacher education was falling, and that the JCE graduates who obtained their certificates by accumulation were having problems following the course.

higher than in conventional secondary schools (Kunje and Lewin 2000). Although these ex-DEC student teachers may well become qualified teachers through MIITEP, depending on the pass mark set for the final exams, they might still be considered to be under-prepared to teach all subjects across the eight standards of primary schools.

3.5 Gender inequity and teacher education

3.5.1 Proportion of boarding facilities allocated to women

Gender inequities found throughout primary and secondary schools lead to unequal participation of males and females in tertiary education. Since teaching is often a low-status profession however, in some countries participation in teacher training is weighted towards women. Nevertheless, during the fifteen years from 1980 to 1995 female enrolment in Malawian teacher training colleges varied little and was around 38% at the beginning and end of the period, (Swainson et al, 1998:17-18). This is a reflection of government policy that reserved only around of third of all boarding places at the residential colleges for women, (Kunje with Chimombo, 1999). It is unclear whether this placed a ceiling on the numbers of women training to be teachers. 12 Males continue to outnumber females across all the MIITEP cohorts; on average, only just over a third of trainees are female, approximately 36% (Kunje and Lewin 2000). This may be due to the same distribution of male/female boarding places, however, there did seem to be the potential for flexibility here with a rolling cohort system and short-term residential courses. For example, when I visited a college in the north of Malawi the cohort in residence was all-male; a lecturer told me that this was because they had a lot of male untrained teachers in their region, and so it had been decided to make that cohort all male, although they usually ran mixed courses. Making a college all female for a cohort would be a way of increasing the number of boarding places available for women. ¹³

There is however a group of untrained teachers who have not yet been enrolled in MIITEP. Over half of this group of around 8,000 is female, with, on average, lower qualifications than those who have already been enrolled in MIITEP. I interviewed one of these teachers who said she hoped that the programme would continue so that she could be part of an additional cohort.

3.5.2 College tutors

The proportion of female trainees is similar to the proportion of female teaching college tutors. In a sample of two of the six Malawian teacher training colleges, another MUSTER sub-study found that women made up 36% of the tutors¹⁴. Access to teacher education for women trainees and tutors, is only one aspect of gender equity and in this paper I do not have space to look in detail at the experiences of

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¹² In the Basic Education Statistics, figures for JCE passes were not gender disaggregated until 1997, so it is not possible to see from these if there was a pool of qualified female candidates who might have wished to become teachers, but could not because of a lack of boarding facilities for women

¹³ Toilet facilities might need to be upgraded prior to this.

¹⁴ Stuart, personal communication, June 2000. A forthcoming MUSTER discussion paper will provide a gender analysis of the qualifications of tutors and the roles they play in these two colleges.

female trainees and tutors in the colleges except for a brief comment on the curriculum.

3.5.3 Curriculum

The Student Teacher Handbooks given out through MIITEP are potentially beneficial for gender equity, but the aspiration of promoting gender equity might not have been fulfilled due to the difficulty some students have in accessing the content of the course. The limited level of English of many of the female trainees, is likely to affect how much they can gain from the intensive course, an issue raised by a headteacher with MIITEP student teachers in her school:

Those MIITEP handbooks, so many pages in three months, and the students are mostly from the DECs. They should be medium-sized, not as big as a bible!

I observed a college class for a group of cohort six student teachers during which some of them were unable to correctly complete an exercise from a primary English textbook.

The overt MIITEP curriculum expressed in the five student teacher handbooks given to all trainees explicitly mentions the promotion of gender equality, particularly in units on Foundation Studies such as classroom management¹⁵. In some subjects, such as Agriculture, there also seems to be an effort to break down gender-stereotyping of tasks, such as plough maintenance. Whether and how this is implemented would require separate investigation.

3.6 Infant teaching: A suitable job for a woman?

Having looked at the gender gaps found throughout the schools and teacher education colleges, I will now consider if these are reproduced in the employment patterns of women teachers, particularly lower primary teachers. I will also look at the extent to which the image of an infant teacher in Malawi is gendered.

The feminisation of the teaching force is a well-documented world-wide phenomenon, with the lower primary section of schools often containing the highest proportion of female teachers, although headteachers, (except for lower primary/infant headteachers), are often men (Evetts, 1990). Gaynor notes that teaching is one of the 'feminized' occupations that are 'seen as suitable for women, i.e. extensions of their reproductive and nurturing role' (1997:7). The function of male teachers however, is often to be associated with 'authority and power' (op cit:8).

The following section will consider two questions; 'Are infant teachers mainly female in Malawi?' and 'What is the image of an infant teacher?'

3.6.1 Infant teachers and gender

The first question can be dvided into two; 'Are most infant teachers women, and are most women teachers, teaching at the infant level?

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¹⁵ For example in Handbook 4:1200, and 1207

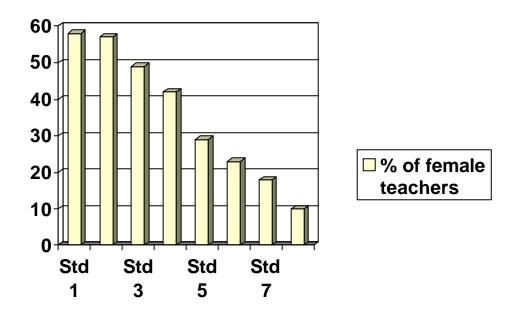
Figure 3.2 overleaf, shows clearly that most infant teachers are women, with around 58% of teachers in Standard 1 and 2 being female. These figures also suggest that it is fairly common for a man to be an infant teacher. According to the Ministry of Education's 1997 figures, 39% of primary school teachers are women, a figure that matches closely the percentages of women trained as teachers under MIITEP and previous programmes, given above (36% and 38% respectively). The proportion of women trained seems therefore to be a good indicator of the proportion of women to be found in the teaching profession. Nearly half of these women (46%), around 8,400, are infant teachers; most of the others are teaching in Standards 3 and 4, and only 7% of women teachers are teaching in Standards 7 and 8. So, although less than half of women teachers are infant teachers, the majority of the female teaching force is working in the lower four primary standards, and it is very unusual for a woman to teach the two highest primary standards.

Kadzamira and Chibwana in the GAPS report found a similar picture in their sample of 349 teachers in 20 schools:

The allocation of teachers to standards by gender is also striking...Female teachers are concentrated in the lower standards, which are perceived to be less difficult to handle than the senior classes, falsely so in the light of the number of pupils they have to handle. This argument is further strengthened by the high status accorded to senior classes because of Malawi's exam-driven system. Of all the female teachers included in the sample only two female teachers were teaching in standard 8. Overall, 84 per cent of the female teachers were teaching in standard 1 to 5 as opposed to 45 per cent of the male teachers. This is worth mentioning because it perpetuates perceptions of inequalities in female and male intellectual abilities (2000:101)

Figure 3.2: Percentage of Female Primary Teachers by Standard

Percentage of female primary teachers by standard Source: Basic Education Statistics 1997, MOE



3.7 Distribution of teachers between rural and urban schools

The picture is complicated by differences between urban and rural teachers, and between qualified and unqualified teachers, (Kunje with Chimombo 1999, Kadzamira and Chibwana, 2000). It is government policy that temporary teachers (this includes all unqualified teachers including those being trained under MIITEP) should teach the middle primary standards. This is presumably because they are perceived to be the easiest standards to teach, as the class sizes are not as large as lower down the school, and the content is not as difficult as in the higher standards. Unqualified teachers might also be considered to do least harm here. They would not affect children's first impressions of school, and first steps in acquiring numeracy and literacy, or the pupils' chances, and the school's reputation, by teaching at the top end of the school where pupils are preparing for external examinations, (the Primary School Leaving Certificate). During my study, however, I found many temporary teachers working in Kunje and Lewin (2000) note that in many schools temporary teachers are in the majority, and in these cases most standards must be taught by temporary teachers.

The reason that temporary teachers are in the majority in a significant number of schools is because, although around half of all teachers in active service are qualified, they are concentrated in urban areas. Temporary teachers were recruited to fill vacancies in rural schools. The concentration of qualified, experienced teachers in towns has serious implications for MIITEP, which is predominantly a school-based training programme that would benefit from student teachers having the support of

qualified teachers. In particular, female qualified teachers are mainly in town schools, with only around a quarter of the female teaching force working in rural schools. The explanation for this pronounced skewing is likely to involve some interplay of class and gender. Jobs in urban areas, including many district centres, are popular for their access to retail, education and health facilities. Women are often described as 'following their husbands', a situation in which a woman moves jobs to work nearer her husband. A man with a relatively high-status job may well be instrumental in securing a position for his wife near to his own posting. In many government jobs, applications by women for postings near to their husband's place of work are looked on favourably. One student teacher, however, reported that this policy does not apply to temporary teachers, and so she left teaching for a while in order to live with her husband in his new post.

I started teaching in 1994, and in 1995, 1996 I was dropped out because my husband was posted in Mwanza, so they, we are not allowed the temporary teachers to follow husband, so they retrenched me. And then I started again in 1997.

Jobs in rural schools are less popular in many countries due to the lack of access to facilities, and their remoteness. Writing about Sri Lanka, Tatto and Dharmadasa note that:

Rural teachers' situation is typically less favourable and is characterized by low mobility, challenging work conditions, and reduced possibilities for education and other professional development opportunities (1995:101).

Hyde et al point out that even at a time of high unemployment for MSCE-holders in Malawi: 'they do not want to be primary teachers, particularly when being a primary school teacher involves living in an isolated rural community among "strangers" (1996:56). Kadzamira and Chibwana consider housing to be an important issue:

One way of attracting female teachers to teach in rural areas is to give them priority in the allocation of teachers' houses and also to allocate them houses within the school premises (2000:120)

This last comment suggests that female teachers may be concerned about their safety if they live alone.¹⁷ The Primary Community Schools Programme has begun to address the shortage of rental accommodation by providing teachers' houses as well as classroom and administration blocks at the schools they have built.

A teacher recruitment drive in December 1999 advertised for MSCE-holders to teach in rural areas. At interview it was again explained that the posts were in rural districts. Out of over 9000 successful candidates who are currently undergoing orientation in three phases, only a little under 20% are female. These candidates are

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¹⁶ Peri-urban schools (in high-density suburbs) and rural schools close to towns may have poor housing for teachers and insufficient classrooms, but remain popular with teachers, suggesting that it is the facilities in town which play some role.

¹⁷ I do not have evidence from Malawi of such security problems, but did know a newly qualified teacher in a rural Namibian school who had had a younger man try and break into her village home. She came to the Regional Education Office where I worked to ask for a transfer, but in the meantime was persuaded to return to her school, taking her sister to live with her.

predominantly from towns, as suitably qualified candidates were not found in rural areas. According to an education official involved in the recruitment drive, women do not want to join teaching because they do not want to work in rural schools. 'They fear they will be banished to rural life and bleak prospects of finding a suitably qualified husband.' There are other possible explanations for the low percentage of female recruits, including the low overall number of female MSCE graduates, which will be commented on in section 4.1. The following discussion will however attempt to 'unpack' the explanation that the lack of female teachers in rural schools is women's fault because they do not want to work in rural areas.

If it is true that teaching in rural schools is particularly unattractive to women, there may be complex gender issues here, perhaps women are expected/expect to have a better-qualified husband, and perhaps there are some cultural differences between those who have been formally educated and those who have not, including in the way men and women might expect to relate in a marriage.

The major reasons why rural life is not attractive, however, may well be economic; Malawi is a poor country, ranked 161 out of 174 countries on the Human Development Index (www.undp.org). Life in a rural area married to a Malawian subsistence farmer is likely to involve poverty and little opportunity to move together to an urban area. Additionally, in a poor community there will be fewer opportunities for teachers to generate a second income by tutoring or trading out of school hours. This is often officially 'frowned on' even when it does not appear to interfere with teaching duties, despite its widespread occurrence and the extremely low level of teachers' salaries. Fewer women than men obtain promotion in the education system, in the GAPS sample of 20 schools there were only two female headteachers (Kadzamira and Chibwana 2000). The relative effect of opportunities for generating extra income and their partner's income might therefore be greater for women than for men.

Attracting and retaining teachers in rural schools is clearly an issue in Malawi. In particular there is a need for more qualified teachers and female teachers in rural areas. In some countries there are policies to increase the supply of teachers to rural schools, for example in Sri Lanka beginning teachers must work for a maximum of three years in 'difficult' schools, usually those that are remote and under-resourced (Tatto and Dharmadasa, 1995). In effect the Malawian system is similar to this in that entrants to teacher education programmes such as MIITEP must first work as temporary teachers in rural schools, and continue working throughout most of their course. More research is needed into incentives that would promote the recruitment and retention of qualified female teachers in rural schools although the improved working and living conditions at schools built by PCOSP do appear to help with this issue.

The proportion of temporary teachers who are female, 42%, is similar to the overall proportion of female teachers, 39%. Thus, even with a policy of temporary teachers taking the middle primary classes, if the allocation of teachers across standards within and between schools was gender-balanced, around 40% of teachers in each standard would be female. In urban districts the pattern of a high proportion of women teachers

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¹⁸ Interview conducted by Demis Kunje, July 2000

in the lower standards is similar to the national picture, although the overall proportion of women to men is much higher than the national average, (for example in Zomba Urban; 94% of teachers are female in Standard 1, and 44% are female in Standard 8)¹⁹.

The allocation of teachers within schools is the responsibility of the headteacher, although there seems to be a degree of negotiation with the teachers. Some of the infant teachers in my study, both male and female, said that they had asked for the infant standards, while other teachers of both sexes talked about having to teach a standard that they did not enjoy. The next section will look at the image of an infant teacher in Malawi, and see if this can help explain why infant standards are disproportionately allocated to women teachers.

3.8 The image of an infant teacher

First, I will look at the extent to which infant teachers are thought of as female, before considering the type of female role that they are expected to fulfill. I asked 22 student teachers, divided into six focus groups, to draw a picture of an infant teacher. I used these pictures as the basis for discussions about their image of an infant teacher, their own experience of primary teaching, their ideas of how to teach, and the conditions in which they taught.

Table 3.2: Sex of drawings of infant teachers by student teachers

Gender of infant teacher drawn by student teacher	Number of student teachers
Females drawing female teachers	16
Females drawing male teachers	2
Males drawing male teachers	4
Males drawing female teachers	0

All of the men (4/4) drew male infant teachers. As many infant teachers are women it is interesting that none of the men drew women. It may be that many of the students were drawing themselves as the teachers. Most of the women drew female teachers, however a couple (2/18) of the women drew male infant teachers. Most of the teachers did not elaborate when I commented on the sex of their teacher drawings although one exchange went as follows:

AC: And your teachers are both women.

L: Yes

AC: Why have you done two women for infant teachers?

L: Because they always give the women infant classes.

This was in the group where two women had drawn male teachers. In another group a female student teacher again expressed the idea that infant teaching was for women, although she had only taught in standard 5:

AC: Why did you draw a woman?

¹⁹ Basic Education Statistics 1997, Ministry of Education

D: *Only women can be an infant teacher.*

No teachers stated that only men could be infant teachers.

Some of the male student teachers were teaching infants, however, and I asked them about their favourite standard to teach. One declared that he did not like infant standards because there was 'too much urine' in class, presumably from incontinent small children. Another said that standard 6 was his favourite class because he liked science and mathematics. This teacher was in MIITEP cohort 1, where all the student teachers were MSCE-holders. As a relatively academically well-qualified teacher he could expect to be given higher standards in future, although he was teaching standard 1 at the time. Other qualified male infant teachers insisted that they taught these standards because they liked the children's enthusiasm.

The drawings and discussions show different ideas around gender and infant teaching. For some teachers, infant teachers can be male, while for others this is definitely a job for a woman.

A study in the Gambia and South Africa that looked at teachers' explanations of what teaching is, found that they often used the 'language of parenting as the basic metaphor for primary teaching' (Jessop and Penny, 1998: 398). In the early standards, parenting was sometimes interpreted as mothering. If this understanding of the role of an infant teacher is also found in Malawi, it could form part of the explanation for the gender-stereotyping of women as lower primary teachers.

In an informal discussion, after observing her lesson, a qualified teacher explained how she was like a mother to the children in her infant class, adding that if you are 'harsh' with them they will stop attending school. Another qualified teacher, when asked about attendance patterns in her class, talked about how the children's attendance had been poor when she was absent due to ill health. This suggest the importance of their relationship with her, although it could also be related to the children's feelings about being taught in a large group when two classes are amalgamated. In her written autobiography²⁰ a student teacher recalls her own relationship with a Standard 1 teacher during her first days at school:

When I was in Standard one I did not know the reason for going to school. I was just interested in playing with my fellow friends. Most of the time I cried During break to go home and eat lunch. My teacher encouraged me not to go home and stopped me crying by sharing me some food she prepared for her daughter. At home my mother said to me not to cry at school because when I can be well educated I can be teacher or a nurse she encouraged me to go to school everyday and, she prepared packed meal for me to take when I was going to school.

English language abilities.

²⁰ Data collected as part of the wider MUSTER study. I have included in this analysis the autobiographies of three of the student teachers from the MUSTER longitudinal study who I interviewed, observed teach and visited at their homes. Quotations from the autobiographies and interviews are recorded verbatim, or as written; this gives some indication of the student teachers'

During an interview, I asked another student teacher if she could think of a good teacher she had when she was a pupil in the infant standards. She described her Standard 1 teacher as follows: 'She knew that I'm teaching the children, so I have to handle them as my own children.'

3.9 Summary

Women are under-represented in the teaching force as a whole, and are concentrated in the lower primary standards that have lower status than other teaching posts. Although almost half of all infant teachers are men, and some male teachers told me that they asked to be given these standards, most female teachers have an image of infant teaching as either a job for a motherly woman, or a job that is given to women. The relatively low numbers of women in the profession, 39% of the teaching force in 1997, and also the underqualification of many women teachers, is the legacy of an historic lack of equity in access to primary and secondary education for girls. As long as gender gaps continue in the school system this will affect the future supply of teachers. The next section will discuss several government and other policy proposals aimed at reducing the gender gaps in the Malawian education system that relate to teacher education.

4. POLICIES TO INCREASE GENDER EQUITY

4.1 Increasing the numbers of female teachers

As noted above the draft Malawian Policy and Investment Framework (PIF) aims to increase female participation in all levels of the education system to 'at least 50%'. With regard to teachers, the PIF states that the Ministry of Education (MoES&C) will introduce incentives to ensure that more women are recruited as primary school teachers.

4.1.2 Benefits of female teachers

As well as providing greater equity for women in access to teaching as a career, female teachers in schools are often thought to be potential role models for girl pupils (Kunje with Chimombo 1999). Kadzamira and Chibwana, (2000) found that when school pupils had role models these tended to be a person of the same sex in formal employment. The young person's own career aspirations closely reflected the occupation of their most admired person. Comments from my interviews, and from autobiographies written as part of the wider MUSTER Project, contain examples of female teachers acting as role models and mentors.

I had a bad habit I liked playing in class while the teacher was teaching. And I had difficulties in the following subjects Arithmetic, English and Science subjects. I hated these subjects very much. Luck enough we had Madam Mrs Phiri who was trying to encourage us about how school is good. She tried to give us her example that she had no parent to pay her school fees. But she tried her own effort until she finished her education — and by then she joined teaching. This madam was teaching us Arithmetic in standard 8 she was a good teacher.... At the same school... we had the best teacher who was the one encouraged me to continue with my education though I didn't finished what she wanted us to be.... The woman was looking very young but a hard worker in class. When someone was absent she was trying to find out what was wrong to the boy or girl. She was doing this especially to us girls, because in these day(s) pregnancies cases were just too much, so she tried these incidence not to be happened again. Through fear of this teacher many girls were selected to go to different secondary schools. (Student autobiography).

A second potential benefit to schools is a woman teacher's role in helping to create a more supportive environment for girl pupils²¹. The need for this is stated in the PIF; 'Gender equity shall be promoted by making the school an environment supportive of the needs of both boys and girls' (PIF, 2000:16). Kadzamira and Chibwana (2000) found that the majority of girl pupils in their study preferred to be taught by women, because they felt at ease talking to them, and because male teachers sometimes

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²¹ Vanbelle-Prouty and Miske, (1997) discuss in depth the possible effects of teacher as role model, and the teacher as nurturer/facilitator of learning. The latter appears to be more important for girls' persistence and achievement in school.

harassed them. There were, however, some negative comments about female teachers' ability to teach senior classes from boys and girls. To break through gender-stereotyped pupil perceptions, female teachers may need support in developing additional classroom management strategies that break down existing prejudices about their teaching ability. In a gendered school environment it might be that female teachers who are going beyond their expected role, i.e. teaching senior classes, have to work harder than male teachers to successfully teach the same classes. Allocating female teachers to higher-status positions is not enough to promote gender equity, if they do not have the support necessary to do their jobs well.

The Primary Community Schools Programme described above provides an example of a similar situation in which women are enabled to develop their skills when they obtain promotion. PCOSP requests that district education offices appoint either a female headteacher or a female deputy headteacher to the primary schools that the PCOSP is building. PCOSP provide school management training for the school management team, male and female, and support visits to the schools. The women I spoke to were very happy with this support, and spontaneously commented that the INSET had enabled them to be successful managers. This kind of support would seem to be helpful to many women when breaking down gender-stereotypes of their roles.

4.2 Raising entry criteria for selection to teacher training

In an effort to increase the quality of teachers, and hence primary education, the draft PIF includes the following policy:

Beginning 2000, the minimum entry qualification for primary school teacher trainee shall be raised to MSCE and the current untrained teachers who are JCE holders shall be afforded an opportunity to upgrade their academic qualifications and to take advantage of the available training opportunities. From 2000, potential primary teacher trainees will be required to have credit passes in Mathematics, English, one natural science and one social science. (2000:22)

This policy is currently under debate and there is some question over whether its implementation could be sustained. A strong argument against implementation in the short and medium term is presented in Kunje and Lewin (2000). They project a demand for around 10,000 new primary teachers per annum for the next few years, but a likely yearly supply to primary teacher education of no more than 1000 MSCE graduates given the competition from other career/study opportunities open to them.

As discussed in section 3 above, the most recent TDU advertising campaign in December 1999 recruited a surprisingly large number of MSCE-holders: over 9073. Some of these obtained their qualification several years ago, and so it is likely that a lack of jobs in other sectors of the formal economy has attracted people to teaching who did not join at their first opportunity. This lack of alternatives has probably also allowed teaching to recruit a greater percentage than Kunje and Lewin predicted of the 1999 MSCE graduates. It is not at all clear that this level of recruitment, close to the 10,000 required per annum, will be sustained in the future, particularly if last

year's exercise recruited most of the formally unemployed MSCE graduates from the past several years.

There is also a need to consider the possibility that inflating the qualifications necessary for a post will affect men and women differently. The historic gender gap affects the recent cohorts of MSCE graduates, and the current gender gap in primary and secondary schools will affect future cohorts of potential primary teacher education recruits for many years to come. Fewer women than men have the opportunity to succeed at this level (see table 3.1b), and therefore, raising the minimum entry criteria for teacher training will conflict with the desire to recruit more female primary teachers.

Of the 9073 MSCE-holders recruited in late 1999 only 1753, around 20% were females. As discussed in section 2, an education official attributed this to women not wanting the rural location of the jobs, as well as noting that in the rural districts they did not find women with the MSCE. As the figures in table 2 show, it is likely that the limited overall number of women with MSCE could account for a substantial part of the difference in female and male recruitment. The explanation that women do not want to work in rural areas should not go unquestioned; significant numbers of women were recruited into teaching as temporary teachers to teach in rural areas under MIITEP when the qualification was lower, although it seems likely that most teachers would prefer a town posting if available. Over three-quarters of Malawi's people live in rural areas, the issue of recruiting and retaining teachers for rural schools is therefore important for creating an equitable education system. If there are factors that make rural schools particularly inhospitable for women teachers they should be addressed (eg housing), however, women's apparent reluctance to work in rural areas does not constitute the largest part of the teacher recruitment problem, and it seems likely that raising the main entry criterion to teaching to MSCE level will lead to a shortfall in the overall number of teachers, and not allow the recruitment of greater numbers of women into teaching.

Decisions made about the organisation of the educational system, both at school and teacher education college level, are not gender-neutral. While the gender effects of the system might be unintended, failure to consider how the system affects males and females differently by gender, and to research solutions, is increasingly an active choice rather than a passive omission, as policy-makers, implementers, and researchers become more aware of the gender dimensions of their work.

4.3 Academic upgrading while teaching: a second chance for women?

Significantly increasing teachers' pay as recommended in the GAPS report, for example, might attract more MSCE-holders into teaching; however, as the pressure on 'jobs in town' shows, working and living conditions are also important, and there may still be insufficient MSCE graduates wanting to join primary teaching. This will also not address the issue of unequal access to educational achievement at secondary level that results in few women obtaining MSCE.

One way of increasing the gender equity of the education system, and having betterqualified female primary school teachers, is to provide more flexible forms of delivering the secondary curriculum to suit young women's lives, even if the academic nature of the curriculum remains the same. This is recognised in the above policy with regard to the approximately 7,500 JCE-holders, mostly women, working in the schools as temporary teachers and not enrolled in MIITEP. The women who have obtained JCEs could be viewed as those who have successfully negotiated their way through a system with the odds stacked against them. They are likely not to have fulfilled their academic potential, but may well be capable of being good teachers nonetheless. Several headteachers in my study praised the teaching of some of the MIITEP trainees who had only a JCE certificate. In a large-scale study of teachers and lower primary pupils in West Africa, pass, failure and drop-out rates did not show any systematic relationship to the educational level of the teachers, (Daun, 1997). In a study of Village Based Schools run by Save the Children Federation in Mangochi, a district of Malawi, Hyde et al (1996) found that the pupils in infant classes performed as well or better than pupils in government schools although their teachers had only a Primary School Leaving Certificate.

Many of the women teachers I spoke to had left school early, as noted above in section 3, and had continued their studies while juggling their other commitments, such as childcare, housework, employment, and growing food for home consumption or sale. Food in the shops is expensive compared to salary levels; for example, while I was doing my fieldwork a temporary teacher's entire monthly salary bought about ten 1 litre bottles of cooking oil.

After gaining their JCE, many teachers were motivated to upgrade their qualifications to MSCE by distance learning. The Ministry of Education's Teacher Development Unit (TDU) co-ordinates MIITEP and keeps a database of all the temporary teachers. Evidence that a small number of temporary teachers were passing their MSCE was supplied by TDU as the temporary teachers send notification of their upgraded qualification to this unit.²² This appears to be a good deal for the government as the costs of obtaining the senior secondary level certificate are borne by the individual (such as fees for the vacation revision courses run by the teachers' union). The salary differentials between JC and MSCE-holders although small, may be part of the incentive for teachers to do this. Other incentives may be self-fulfilment and increased opportunities for promotion.

A rights-based ideology of education, where inequality of opportunity is held to contradict justice (Lamm, 1990:29) supports the upgrading of JCE holders in post, to give women a 'second chance' to complete their secondary education. Greene describes this concept as follows:

Second chances in education obviously depend in great measure on the provision of opportunities for those who feel dissatisfied with what they are doing or have done, deprived, discriminated against, unlucky, or incomplete. They may not have been able to make the best uses of their initial chances because of stringencies in their lives: family pressures, economic need... The

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²² In an interview I was told that in the first six months of 1999, TDU had received this notification from six or seven temporary teachers.

demands of their environment may have halted them, deflected their energies, and stopped them from even considering alternatives. There may have been no support for their desires, no one to suggest a direction take...(1990:37)

Lamm, however, comments that although this situation is commonly known as a second chance, where people have been deprived of a chance of educational success in childhood or youth, it is '...actually the first chance they were being given.' (1990:29)

Primary teaching is however not seen as an end in itself by many of my participants as the following quotations from three student teacher autobiographies show.²³

Teaching is and still my future career and I want to try hard to get an MSCE so then I will apply for a diploma course at Domasi because I want to be a secondary teacher.

Teaching will be my future career. I will first try as much as possible to get an MSCE then go to Domasi and get a degree. From there I want to be a secondary teacher or Headmistress.

I'm glad to inform you that now I have got MSCE through my part-time study. But I'm not satisfied with this qualification I want to continue reading so that one day I will become a tutor at any Teacher Training Colleges all elsewhere. I got MSCE through in-service courses which conducted by teachers union of Malawi (TUM).

Their views may result from secondary teachers' better pay and higher status.

4.4 Women's multiple roles and the structure of teacher education programmes

On the one hand it can be considered that distance learning can give women access to education and training by providing flexibility so that they can fulfil their other family responsibilities. On the other hand, residential courses have the advantage of giving women temporary respite from their multiple responsibilities, and time to study. (Hurst, 1997). Several of the student teachers that I interviewed had stopped their academic upgrading while taking the two-year MIITEP course.

One student had originally been selected for an earlier cohort, but had been able to delay her attendance at college for the three-month residential period as her baby was very young. She therefore joined the last cohort of MIITEP trainees. I spoke to her six months into her twenty-month period of distance study for MIITEP. She had failed her MSCE at school, but had since taken some subjects and passed them while teaching:

²³ These are the comments of the three women who participated in both my study and the MUSTER longitudinal study, and were not especially selected for their ambition.

AC: So, you're getting there. That's good, are you taking some this year?

ST: *No, this year I'm not taking.*

AC: Why is that?

ST: I'm not ready, I'm so busy with the MIITEP work. So, reading the MIITEP notes, and to read the notes what I'm going to write the MSCE, it's difficult. It's better to take on one part and the other part later on. Yes.....

AC: How do you find time for studying for MIITEP?

ST: During nights. I think I have time during the night hours. From eight o'clock to ten reading notes, then after that, sleeping. Then three o'clock waking up, reading, to four o'clock. After that then...[trailed off]

AC: *So, four o'clock, what do you do?*

ST: Four o'clock, from four o'clock up to five o'clock busy, I'll be busy cooking, ready for going to school.

AC: How many people do you have to cook for?

ST: *Three, three people*

AC: And how do you cook? On a wood fire, on charcoal?

ST: *Mbaula* (*charcoal*).... *Or log fire which we use. That's how I cook.*

AC: *From five o'clock?*

ST: From five o'clock washing, and then cooking breakfast, eating breakfast on the way to school.

AC: What time do you leave home?

ST: I leave home at quarter to seven. By seven o'clock I will be here. From seven o'clock to quarter past seven pupils are busy working, sweeping, around this school. From quarter past to half past; assembly, then half past starting our lessons.

Disturbingly, the MIITEP trainees seem to have to teach more periods a week than qualified teachers, even though they are also studying. Kadzamira and Chibwana, (2000) looked at the average workload of 349 teachers with varying qualifications. They found that although the untrained teachers were mostly enrolled in MIITEP and therefore studying as well as working, they had a mean of 29 periods to teach each week, compared to 25 periods for qualified teachers with a JCE, and 23 periods for qualified teachers with an MSCE. 74 of the untrained teachers were female and 57 of them were male.²⁴ There was an even sharper split between untrained teachers in urban and rural schools; with the latter teaching 32 periods per week, compared to 22 periods for their urban counterparts.

There are conflicting ideas on the suitability of residential courses for women. Earlier teacher training programmes in Malawi were fully residential for one or two years, and, as noted above, only a third of the hostel places were reserved for women. TTC lecturers often suggested to me that if MIITEP was adapted so that JCE-holders came to college for five or six months, compared to the existing three months, it would be long enough to cover the course material adequately, given the trainees weak academic background. It might also provide an opportunity to give them some

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²⁴ At one level these differences are probably 'explained' by the temporary teachers being lower primary classteachers with a full timetable, and the qualified teachers being upper primary subject teachers. This does not however explain why in many countries subject teachers have lighter timetables than lower primary classteachers. On the other hand, the length of a teaching period sometimes increases in upper primary.

intensive English language tuition. I asked a female college tutor about how this might affect women:

- AC: And what about some of the female teachers, the length of time they're in college? Does that affect men and women differently because of their roles? You know, if they have five, six months in colleges, is that more difficult for them, you know, if they have small children?
- CT: Yeah, it depends, it depends with families. If the baby is very small, under six months, I think it makes life difficult because you think of your baby. Unless you were really determined that come what may I must go to school, so it requires a bit of self-esteem. But maybe for women from very rural areas, it will be very difficult because every time you get a message that your baby is sick, you have to ask permission to go home and look for this child. In my case, when I went to college, we left our child with the grandmother and they never told me of his illness, they told me when he was out of hospital, so I was learning with no obstacles at all. I wasn't thinking about him, I thought, 'Oh, he's being taken care of.' Until when I got a letter, ah, 'We were with him in the hospital, but now he is OK', so what, it has passed. But if they told me that your child is in hospital, surely I would say, I should go and see him, as a mother, those things should come anyway, it's nature.

Currently, however, it might be more difficult for a woman to find adequate childcare as the extended family networks across Southern Africa are under severe pressure; caring for AIDS orphans, and people ill with AIDS. UNAIDS estimate that almost 16% of the adult population (15-49 years) of Malawi were living with HIV/AIDS at the end of 1999 (www.UNAids.org/hivaidsinfo).

One evening I had a conversation with a group of ten female student teachers during the residential period of their course. They were all in their mid-twenties, and all but one had at least one child. They raised the issue of the opportunity cost to them of the residential course, rather than the issue of childcare:

The students complained about teachers' salaries, how they can't afford leather second-hand shoes anymore, but have to buy the all-in-one plastic moulded shoes....Then one of them said that clothes didn't really matter, the fact that they were hungry mattered more, and while they were at college they were too busy to run a business to supplement their salaries. [Excerpt from research diary]

When decisions are made about the future form of initial teacher education in Malawi it is important that the views of stakeholders are sought and used throughout the design and implementation process, so that the structure of the programme will be supportive of women's success.

4.5 Specialised training for infant teachers

In contrast to supporting academic upgrading, an alternative response to the considerable concern about the academic level and English-speaking ability of temporary and student teachers would be for teachers to specialise at different levels of the primary curriculum. Current training expects teachers to teach any subject across eight grades. English is taught only as a subject in Standards 1 to 4, and is the officially the language of instruction from Standard 5²⁵. Teachers working at lower primary level where Chichewa, or another local language is the medium of instruction would not need to be so proficient at English, and would not need as much subject content knowledge as those working with higher standards. They could also focus on relevant pedagogy for this level. There is a need to recognise and validate both general pedagogical knowledge, and specific pedagogy for teaching lower primary subjects, for example the pedagogical content knowledge of the initial teaching of local language literacy.

A more radical solution would be to extend the use of indigenous languages for instruction into the upper primary section, and to have subject specialists teaching English, (Bunyi, 1999). Lowering academic requirements for teaching at this level would allow more women into teaching, as well as addressing issues of teacher recruitment and retention in rural areas. This has been found to be successful in the BRAC non-formal primary education programme in Bangladesh (Lovell and Fatema, 1989).

There have been a number of specialised training programmes for lower primary teachers in Malawi. At one time the formal teacher education system in Malawi had such training. More recently, as described above, the Village-based Schools Project in Mangochi employed and trained local people who mostly had only a Primary School Leaving Certificate as teachers in Standards 1 and 2. A higher percentage of these teachers were female than infant teachers in government schools. The schools were only planned to cater for Standards 1 to 4, and the curriculum was modified to focus on core subjects - English, mathematics, Chichewa and general studies, (Hyde et al, 1996). A report on the project for the funding agency, Save the Children Federation, concluded that children in Standards 1 and 2 in these schools achieved at least as well as similar children in government schools, and that government schools should employ primary school graduates as teachers where housing is a problem (op The Primary Community Schools Programme, working with the District cit). Education Offices, has also attempted to encourage local recruitment, to solve accommodation and other problems in the supply of rural teachers. This was often not possible, as there were no people available in the local community with a Junior Certificate. Government regulations do not allow people with only a Primary School Leaving Certificate, to be employed as teachers in government schools, even though the PCOSP was originally planned to build schools for standards 1 to 4.

I discussed the possibility of specialised training for infant teachers with some of the college tutors and education officials. One tutor commented that this could cause

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²⁵ Williams notes that some teachers in Malawi are said to teach in English from Standard 3, and that 'local languages are in fact used to varying degrees throughout the primary school' (1998:7)

difficulties in the allocation of teachers within and between schools. A Primary Education Advisor, however, spontaneously raised the need for a return to specialised infant training twice during my interview with him. Another potential problem is that lower primary teaching could become a 'ghetto' that less academically qualified women teachers are unable to escape from.

There is a proposal in the GAPS report for teaching assistants to work with teachers in lower primary classes. If implemented this will need to be carefully thought through to ensure that the assistants are not forced to take over a class, and become unqualified and underpaid teachers without opportunities for promotion. Again, if there is support for upgrading in post this could be a positive move, which could allow more women into teaching and help children in large classes learn. Raynor $(2000)^{26}$ described the negative effects of lowering the entry requirements to teaching for women in Bangladesh. This created a second-class system where women had less pay and less chance of promotion than men. As Kadzamira and Chibwana point out however, there is a 'need to address some of the constraints facing education flexibly.' (2000:125)

In discussing the advantages and disadvantages of specialised training for infant teachers it becomes clear that here is a tension here between increasing the representation of women in the teaching force and providing more rural children with teachers and female role models, and a mutual reinforcement of the low status of infant teaching and female teachers by having a lower academic entry requirement for this level of teaching.

Considering the existing problems with the quality of infant education, and the interaction of the low status of teaching at this level with its image as women's work, it may well be counter-productive to introduce specialised training for infant teachers, particularly if this was for women with low qualifications. Given the shortage of recruits to teaching it appears necessary, at least in the short to medium term, to continue employing temporary teachers with a JCE in Standards 3 and 4. This would allow more women entry to teaching at a level where English ability is not as crucial as in higher classes. Any programme provided, should be in addition to supporting upgrading in post, rather than as an alternative, so that it becomes a way forward for women, and not a dead end. The stresses of teaching at this level are frequently not recognised; they include teaching a full timetable with often little more than a chalkboard and one's own energy and personality to motivate and educate over a hundred children for several hours. There is a need to consider redistributing teachers and resources between standards so that the teaching and learning conditions in the lower standards are improved; for example by a reduction in class size. Subject teachers who work in higher standards need a broader knowledge base, but have more resources, may have lighter timetables and therefore time during school hours to prepare lessons or do administration. The work may be different, and require a different balance of skills and perhaps training, but it should be equally valued and compensated appropriately.

²⁶ Presentation given at the Education for All conference, Institute of Education, University of London, 1/6/00

4.6 Promotion

Although women are under-represented in teaching, and are mostly teaching lower standards, there were also some women in positions of authority at the top of the teacher education hierarchy, including female principals of teacher education colleges, and a female director of the Teacher Development Unit at the Ministry of Education. It may be that a career in education is one of the few open to well-qualified women.

Women teachers and tutors descriptions of their efforts to upgrade themselves academically, generally portray a very active role for themselves. By contrast however, their role in their promotion sounds as if it is most often bestowed rather than being sought, with people being moved around by the District Education Offices and the Ministry of Education. This parallels Evetts' (1990) description of the role of headteachers and inspectors/advisors in the UK as gatekeepers to promotion who suggest to female teachers that they apply for promotion. In Malawi some women described how they resisted promotion offered to them by Primary Education Advisors. One teacher refused a headship in one school because of 'the weather' there, and also promotion to headteacher in the school where she was teaching because of her opinion of the temporary teachers:

...most of the temporary teachers who were appointed in 1994 were rude, and I said aargh, I can't, I won't head this school just because of these teachers. Had it been that there were qualified teachers, that was OK, but with the temporary teachers aargh, shame!

When I spoke to her she was enjoying her position in management in a community school, and was pleased with the support and training she had received from the PCOSP.

Although the District Education Officer, (working through the Primary Education Advisors) allocates teachers to posts, teachers passive comments 'I was posted' may however mask informal lobbying and the role of networks and 'connections'. One male teacher educator described to me the way he had come to be in his current position

AC: *Did you apply to be a lecturer or how did you come to be a lecturer here?*

TE: No, the ministry had to post me to this post. I didn't apply. Of course I had shown an interest at one point... People were asking me, they were normally asking, you, where would you like, so I showed the interest in joining this area. Yes, I taught briefly in primary school soon after my secondary school.

As his final point indicates, obtaining a post is not only about 'showing an interest', but also about having relevant experience and qualifications. There may be issues here about how much women have access to the relevant networks, and also about how much they will put themselves forward. One woman talked about her husband's role in her application for a diploma in teacher education, which led to her promotion to college tutor:

I had a baby about one year old, and when this advert came out, I said no, I think my baby's small, I have to take care of the baby. But he said, no, you must apply. But I said no, the baby is small. He applied, he did the application for me and asked me only to sign!

Many senior positions in Malawi are filled by people 'acting' or with unestablished status, and they are not therefore paid for their additional responsibility. There has been a push for jobs to be advertised, and people recruited through selection by interview, although this will mean that the government's salary bill will increase. An additional effect of 'acting' in a post, is that when people do achieve higher positions in the hierarchy, they can be demoted when the minimum qualifications required for the job are increased. This may affect women more than men, as women have often had less access to education.

4.7 Gender issues in making primary teacher training an all-graduate profession

The following section will look at the proposal to increase the minimum qualifications for primary teacher trainers. As well as proposing that the entry requirements to teaching should be increased, as described above, the draft PIF (January 2000 version) also proposes increasing the minimum qualifications of the primary teacher trainers:

The MoES&C shall pursue the target of raising the minimum qualification for a primary teacher trainer to possession of at least a first degree and at least three years teaching experience in primary schools. (2000:22)

I welcome the balance shown in the above policy proposal between academic qualification and relevant work experience. With the skewing of women's teaching experience towards the lower standards, and towards primary school teaching in general, this will recognise what they can bring to a job as a teaching college tutor. The tutors I spoke to had all had primary school teaching experience, although at least one younger male tutor had only taught standards 7 and 8. In their in-depth study of a 20% sample of Malawi's teacher education tutors, by questionnaire and interview, Stuart and Kunje found that 90% of the tutors had primary teaching experience, ranging from 1 to 17 years. This sharply contradicts the German (GTZ) project review report on MIITEP which states that, 'Nearly 80% of the tutors lack any first hand teaching experience in primary school'(1998:40). Some of the tutors I spoke to tended to focus on their secondary school teaching experience, presumably because this has higher status, and it was only by repeated questioning and checking that I discovered that they did in fact have some primary experience.

As women have been disadvantaged in the education system in Malawi, it might be fairest to move towards an all-graduate profession for college tutors by allowing current tutors who so wished, and other recruits to the colleges to upgrade to graduate status in post. This would mean allowing tutors time and opportunities to upgrade in post rather than demoting them. It would also provide an opportunity to integrate theoretical knowledge gained from academic study, and practical knowledge gained from teaching experience. Current approaches to teacher education, such as action

research, and reflective practice²⁷ encourage this. This kind of first degree-level study would seem to be at least of equal relevance for primary teacher educators as the specialist subject content knowledge that graduates who studied full-time at university for three or four years would gain. A gender analysis of the balance of costs to be borne by the individual or the state would be needed, along with a gender analysis of the way distance or residential components of the course might affect women.

4.8 Summary

If the aim of increasing female participation in all levels of the education system is to be achieved, then the possibility that education policies will affect men and women differently must be considered. In particular, policies which lead to 'qualification inflation' should be carefully considered as these are likely to discriminate against women who have less opportunity to gain qualifications than men. A focus on the ends of education reform, getting teachers and tutors working well at their jobs, should lead to a more creative search for a range of possible options, that will also allow more women to be included. If the level of academic qualification required for a post is raised, then professional and academic upgrading in post will be the fairest With the limited number of academically-qualified people way of achieving this. available to the Malawian education system, it is also likely to be the most pragmatic Therefore, from either a rights-based or an instrumentalist ideological position, the analysis points to the same policy. The constraints on existing postholders in their work performance may well be structural; making them into the underqualified villains of the piece, rather than the victims of an under-resourced system, can only give a short-term impression that something is being done. With the teachers' college tutors, there is an opportunity to redefine qualifications at this level so that professional and academic development can be combined. The current situation, where only a secondary diploma in education is available, reinforces the low status of primary education, and does not help the recruitment and retention of academically well-qualified teachers in primary schools.

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²⁷ These approaches are included in MSSSP's National Training Programme for headteachers. Two headteachers that I interviewed spontaneously commented on how useful this was to them.

5. DISCUSSION

5.1 Women's agency

For women to have a 'second educational chance' (as discussed above), via upgrading in post, it must be perceived as an option by the underqualified teacher or teacher educator, (Inbar, 1990:2). This requires agency: a sense of control over one's own destiny. Comments from the women that I interviewed suggest a strong sense of agency over certain areas of their lives, but also include some ascription of control of their fate to significant others, luck and the will of God (these latter two may on occasion be only a figure of speech, or self-depreciating).

Clearly, the women I talked to were, on this issue, a self-selecting sample. They had achieved a measure of success, in some cases (perhaps most) working hard to do so. It is likely therefore that they would have agency, and that women who felt they had no control, or indeed had very little control over their lives (fighting against barriers which they could not surmount), would not become teachers, headteachers, teacher educators etc. Again, sadly, the issue of HIV/AIDS may be pertinent here, and is perhaps beginning to affect how women view their future and their degree of control over it. There were only a few instances during my fieldwork when I think a woman may have been alluding to this. I asked a student teacher, an MSCE-holder in her mid-twenties, what plans she had for her career in five years' time. She answered that only God knew whether she would still be here in five years' time.

These different ascriptions of agency do not suggest different world-views in water-tight compartments. The same person can ascribe agency to different sources, which may at first sight appear contradictory. There can be a hierarchical relationship between them, where, for example, God could be viewed as working through scientific processes, or a witchdoctor as working through the economic system when a business fails. Or different ascriptions for different realms of life; the Western world of school, college and formal employment being subject to different processes from the world of extended family relationships. To a greater or lesser extent, most people in the world negotiate their own way of living through and between different ways of explaining social and material events.

In several cases, female student teachers had heard from friends or family that temporary teachers were being taken on by the government in the wake of the introduction of free primary education in 1994. They then took the initiative to go to a District Education Office, or to look out for the relevant advertisement and respond to this:

One day I met with my primary school classmate and she told me that she is a teacher, and I asked her how I can be a teacher. She told me to apply for a post as a primary teacher soon after hearing a vacancy of primary school teacher. When the vacancy was out I applied and I was called to attend the interview and I was taken' (written autobiography)

Another student teacher mentions luck three times in her description of significant events in her life. After failing Standard 4 and repeating the year, 'lucky enough i (sic) passed my test at the second time to go to standard five.' In describing a good teacher who taught her at primary school, 'Luck enough we had Madam Mrs Phiri who was trying to encourage us that school was good.' And, again when she describes how she became a teacher;

In 1995 is where I dicided (sic) to write my application letter to Ministry of Education, luck enough I was among those selected to attend interview in Zomba district – on 11th September 1995, and I selected to start teaching in 1997 on 20th February.

Understanding an individual's ascription of agency is a complex process, and the above use of 'luck' may be mostly a figure of speech.

Moving away from the arena of individual educational and career histories; how much do women feel that they can contribute to the direction of Malawian teacher Several college tutors, men and women, expressed the feeling that education? MIITEP had been foisted on them, and that only a few favoured tutors had been able to be involved in the writing of the handbooks. No tutors mentioned that they had been involved in discussions about the structure of MIITEP, including arrangements for teaching practice, and the selection criteria for candidates. The lower primary pedagogy presented in MIITEP is tied to the active learning approaches promoted in the structure of the recently rewritten national extbooks. This is positive in that there is a close link between the college course and the schools, (many of the teacher education handbook units were written by the same teams), however, only a limited number of tutors were able to be involved. Among eachers and tutors the active and participatory learning approaches suggested in the textbooks and handbooks seem to be implemented superficially in many cases, with some clear exceptions. dynamic discussions among groups of student teachers, and also creative and humorous role plays following activities suggested in the handbooks. At school level participation sometimes took a different form from that suggested in the teachers' guides. A small number of teachers were also in the writing teams and I had direct comments on the process from one woman who had enjoyed it and thought it had also helped her get promoted. Another qualified teacher, however, with some thirty years experience, was talking to me about the teaching of English. She referred to a section of the textbook which she thought was over-ambitious for second language teaching for Standard 1 village children. She flicked to the front of the teacher's guide and jabbed at the list of contributors, 'These people, do they know infants? They don't!'²⁸

While not idealising the articulation of teacher voice as automatically empowering and transformative, Jessop and Penny consider that those with the power to define the education system are often loathe to let go of it, and allow teachers a say in policy-making.

'The omission of teacher voice in policy-making continues to represent a failure to understand and take account of endogenous value systems, and to

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²⁸ Curriculum overload was an overwhelming concern, spontaneously raised by many teachers and tutors.

recognise that teachers themselves have explicit and implicit theories about how to achieve sustainable educational change and development.'(1998: 393)

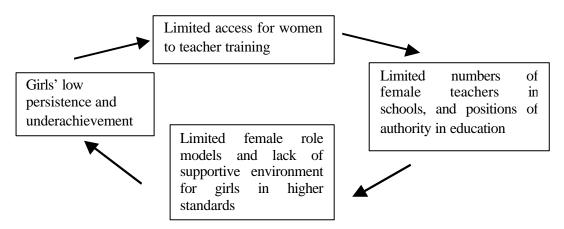
As has been shown earlier in this paper, most of the knowledge of relevant lower primary pedagogy for the Malawian context is held by women teachers, and perhaps also the women teacher educators. Is there therefore a gender dimension to this failure to take teacher voice into account? With the implementation of FPE lower primary classroom conditions in particular have changed considerably, and so it will be necessary to get new teacher educators into the colleges who have experience of the challenges of implementing education for all. What are the possible implications of a lack of consideration of the reality of the classroom for the relevance of teacher education reforms, and the pragmatism of policies? Many older education officials started off their careers as primary teachers and have worked their way up, often obtaining more qualifications en route. Younger 'high-fliers' however, are more likely to have degrees or diplomas, and to have taught only in secondary schools if at While it is not necessary for policy-makers to have first-hand experience of all the areas that they make decisions about, it is important that the views and knowledge of teachers and teacher educators who will have to implement policies are considered.

5.2 Breaking the cycle of female underachievement

There is a need to aim for an academically well-qualified teaching force in Malawi to improve the quality of primary education. In order to achieve this, teacher education tutors need a good understanding of current thinking in education in Africa and globally, and also to have had primary teaching experience. This drive for quality, however, should not be at the expense of equity for women teachers and teacher educators in their career prospects. They are the inheritors of the legacy of gender gaps, and in their contributions to schools should be allowed to be part of the solution to gender inequity for today's generation of Malawian schoolchildren. As has been shown, women teachers form the majority of the infant teaching force. They are likely to have considerable knowledge about the physical and socio-cultural context of infant classes, and first-hand experience of implementing Free Primary Education. Their voice is needed in the education reform process.

In the interests of getting more female teachers in schools, particularly rural schools, and trying to break into the current cycle of girls' underachievement, illustrated by figure 5.1 below, it may be necessary to accept and plan around the current situation; i.e. that women leave education earlier and have multiple roles in society.

Figure 5.1: Cycle of female underachievement as students and teachers in the Malawian education system



Gaynor's (1997) analysis is useful here with her discussion of the more immediate *practical gender needs* of women (eg childcare during studying), and also of the longer term *strategic gender needs*. These latter address inequities in access to further training, under-representation of women in management in education, and form a general challenge to women's subordinate position in the profession. There will need to be consultation with girls and women educationists and other stakeholders at all levels to produce teacher education policies that will work to create a virtuous circle²⁹ where women teachers are able to play their role in reducing gender gaps. Consideration will also need to be given to the attitudes of male educationists. Evidence from the GAPS study suggests that male teachers believe the current programmes to enhance gender equity to be biased against boys (Kadzamira and Chibwana).

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²⁹ I am grateful to Pauline Rose for this way of viewing the situation, and also to her, Dominic Furlong, Demis Kunje, John Pryor and Janet Stuart for other helpful comments on a draft of this paper. Nevertheless, any mistakes in the paper remain my own responsibility.

6. RECOMMENDATIONS

6.1 Policy recommendations

These recommendations are put forward as a stimulus to discussion rather than as definitive answers to complex problems.

- 1 Participation in policy-making: There is a need for increased voice and influence for teachers, teaching college tutors and other stakeholders throughout the planning and implementation of future changes to initial teacher training. This should include gender analysis of policy proposals. Some teachers and college tutors are consulted, but there is a need to broaden representation to counter the current perception that a small group is regularly picked to participate in consultative fora, from which they also benefit financially through subsistence allowances.
- **2 Academic level of student teachers**: In the interests of gender equity and the adequate supply of teachers, the entry point for initial teacher education should not be raised to MSCE in the short or medium term. The teacher education curriculum should be adapted to support the learning of JCE-holders.
- 3 English language support for student teachers: Consideration should be given to lengthening the residential component of initial teacher training to four, five or six months, depending on available finances and possible expansion of boarding capacity in the colleges. During the first month, student teachers could follow an intensive English language course to increase their fluency, accuracy, range of expression and confidence in speaking English. This would then be reinforced by the subsequent months of intensive study in English, from which they would be better able to benefit. With a five or six month programme, the time available to cover the Student Teacher Handbook material could also be expanded. An alternative model would be for an English language course to run concurrently with the existing curriculum for four to six months.
- **4 Proportion of boarding places allocated to women** The proportion of boarding places available for women should be increased. In the short term it might be possible to do this by making one or more cohorts at a normally mixed college all-female. Sanitary facilities might need to be upgraded prior to this.
- 5 Academic upgrading of teachers: Ways of supporting teachers as they upgrade from JCE to MSCE in post should be investigated. This is particularly important for the untrained teachers in schools who are required to upgrade before enrolling in a teacher education course. Most of these are women who are likely to have been disadvantaged in their access to schooling, and who now have to teach, study and raise their families. Support may include providing vacation courses such as those run by the Teachers' Union of Malawi, and encouraging the expansion of the use of the Teacher Development Centres for study circles. If lower primary classroom assistants are employed, their professional development should be considered.

- **6 Professional development of teachers**: Zonal level (ie sub-district) professional development for heads, deputies and qualified teachers should give teachers the opportunity to reflect on social barriers to girls' participation in education. This should also address the issue of supporting girls and women teachers in senior primary standards, including preparation for the development of whole school discipline/behaviour policies at school level.
- **Recruitment of teaching college tutors**: Qualified teachers with experience of implementing Free Primary Education at the lower primary level should be recruited as teachers college tutors. Selection criteria should be transparent and should include primary teaching experience as well as academic qualifications. Consideration should be given to supporting the academic upgrading of female teachers to enable them to qualify. It may be possible for tutors to study inservice through the University of Malawi by distance mode, perhaps with a lighter teaching load. There could be some short residential courses and support visits from the university education faculty as part of this. The college libraries should be updated as a pre-condition for this. Internet and email access should be available for this programme, but the limitations of the telephone, electricity and technical support infrastructure need to be taken seriously. There is no technological 'quick fix' here.
- 8 Upgrading to graduate status of teachers' college tutors: Existing college tutors who wish to remain in service, should be given a number of years in which to upgrade their diploma. The percentage of tutors with primary teaching experience needs clarification, following sharply contradictory research findings. Opportunities should be available for them to study primary education to degree level. Consideration should be given as to how the course can be linked to current primary practice across the standards, and to their own work as teacher educators. Action research projects including at least one at infant level, one looking at gender, and another on teacher education, may be a way of doing this.

6.2 Conclusion

Getting more women into teaching, and into positions of power in education, will require gender analysis of the possible implications of policy proposals. many aspects of teacher education that relate to these issues, such as selection criteria for initial teacher training, the relationship between promotion and qualifications, and access to inservice training and academic upgrading. In particular, where there is a long legacy of gender gaps in education, the women who are now working in education will have been subject to these, so inflating the qualifications needed for a job might well cut out present and potential women employees, for example teachers or teacher educators. Recognising work experience, as with the teacher educator proposal is a useful step. Inservice upgrading programmes will be the fairest way to complement this. The Malawian women I met seemed to have worked hard to obtain their positions, often balancing many other commitments. From a human rights perspective they deserve to be treated fairly, but also the education system needs their contribution. If they are not as well qualified as their male colleagues this is likely to

be due to lack of opportunity earlier on, and it would help them and their pupils if they were assisted to fulfil more of their potential.

REFERENCES

- Bloch, M. & Vavrus, F. (1998) Gender and educational research, policy and practice in sub-Saharan Africa: Theoretical and empirical problems and prospects, in: M. Bloch, J. A. Beoku-Betts & B. R. Tabachnick (Eds) *Women and Education in Sub-Saharan Africa: Power, Opportunities and Constraints*, pp. 1-24 (Boulder/London, Lynne Rienner).
- Bude U, et al (1998) Report on the project progress review: Malawi Integrated Inservice Teacher Education Programme MIITEP. GTZ. Federal Republic of Germany, Bonn.
- Bunyi G (1999) Rethinking the place of African indigenous languages in African education. *International Journal of Educational Development* 19(??):337-350.
- Daun H (1997) Teacher needs, culturally-significant teacher education and educational achievement in an African context the case of Guinea Bissau. *International Journal of Educational Development* 17(1):59-71.
- Evetts J (1990) Women in Primary Teaching: Career contexts and strategies. Unwin Hyman, London.
- Gaynor C (1997) The supply, condition and professional development of women teachers. *The management of teachers*. IIEP, Paris.
- Gipps, C. (1995) What do we mean by equity in relation to assessment? *Assessment in Education*, 2(3), 271-281.
- Gipps, C. & Murphy, P. (1994) A Fair Test? Assessment, Achievement and Equity (Buckingham/Philadelphia, Open University Press).
- Harris, M. (1997) *Common Threads: Women, Mathematics and Work* (Stoke on Trent, Trentham Books).
- Hurst R (1997) Glass ceilings: Do appraisal systems in education serve to impede promotion routes for women managers in education? In J Lynch, C Modgil, S Modgil (eds). *Education and development: Tradition and innovation: Equity and excellence in education for development*. Cassell, London.
- Hyde K et al (1996) *Village Based Schools in Mangochi*: Evaluation Report. University of Malawi: Centre for Educational Research and Training.
- Inbar D E (1990) The legitimation of a second chance. In: DE Inbar (ed) *Second chance in education*. Falmer Press, London/New York
- Jessop T and Penny A (1998) A study of teacher voice and vision in the narratives of rural South African and Gambian primary school teachers. *International Journal of Educational Development* 18(5): 393-403.

- Kadzamira E C and Chibwana M P (2000) *Gender and primary schooling in Malawi*, Research Report 40. Ministry of Education, Malawi/Forum for African Women Educationalists/Institute of Development Studies, Sussex. 177 pages.
- Kadzamira E, et al (1998) Gender and primary schooling in Africa: National research framework: Malawi, Mimeo. MOE/FAWE/IDS, Brighton.
- Kadzamira E, and Rose P (2000) Educational policy choice and policy practice in Malawi: Dilemmas and disjunctures. Social Policy Workshop. Lilongwe, 29-30 March.
- Kunje D, and Stuart J (1996) *An evaluation of the emergency teacher programme in Malawi*. Centre for Educational Research and Training, University of Malawi, Zomba.
- Kunje D, with Chimombo J (1999) *Malawi: a Baseline Study of the Teacher Education System*, MUSTER Discussion Paper 5. Centre for International Education, University of Sussex, Brighton.
- Kunje D, and Lewin K M (2000) *The costs and financing of teacher education in Malawi*: MUSTER discussion paper 2. University of Sussex Institute of Education, Brighton.
- Lamm Z (1990) From the absence of any chance to unlimited opportunities: The concept of 'A second chance' viewed ideologically. In: DE Inbar (ed) *Second chance in education*. Falmer Press, London/New York
- Lovell C and Fatema, K (1989) *The BRAC non-formal primary education programme in Bangladesh*. UNICEF, New York.
- Lynch J (1997) A human rights analysis. Education and development: Tradition and innovation. Cassell, London/Herndon
- Malawi School Support Systems Programme (undated, c.1998) *National Training Programme for Headship* Ministry of Education, Sports and Culture, Lilongwe.
- Ministry of Education, Sports and Culture, Malawi Government (2000) *Education Policy and Investment Framework* (PIF). Ministry of Education, Sports and Culture, Lilongwe. 51 pages.
- Murphy, P. (1995) Sources of inequity: understanding students' responses to assessment, *Assessment in Education*, 2(3), 249-270.
- Nyirenda L H (1991) Progress report on the one year special teacher training programme up to June 1991, Mimeo. Domasi Teachers' College, Malawi
- Robinson B (1997) Distance education for primary teacher training in developing countries. In: J Lynch, C Modgil, S Modgil (eds) *Education and development: Tradition and innovation: Innovations in delivering primary education.*. Cassell, London/Herndon, pp 122-138.

- Serpell, R. (1999) Local accountability to rural communities, in: F. E. Leach & A. Little (Eds) *Education, Cultures and Economics*, pp. 111-139 (New York/London, Falmer).
- Smith L T(1999) *Decolonizing methodologies: Research and indigenous people.* Zed Books, London/New York, University of Otago Press, Dunedin
- Statistics Unit. Planning Division. Ministry of Education. Malawi Government (1992) Education Basic Statistics. Ministry of Education, Lilongwe.
- Statistics Unit. Planning Division. Ministry of Education. Malawi Government (1995) Education Basic Statistics. Ministry of Education, Lilongwe.
- Statistics Unit. Planning Division. Ministry of Education. Malawi Government (1997) *Education Basic Statistics*. Ministry of Education, Lilongwe.
- Swainson N, et al (1998) *Promoting girls' education in Africa; the design and implementation of policy interventions*. Education Research, vol 25. Department for International Development, London.
- Tatto, M. T. & Dharmadasa, K. H. (1995) Social and political contexts of policy formation in teacher education in Sri Lanka, in: M. Ginsburg & B. Lindsay (Eds) *The Political Dimensions of Teacher Education*, pp. 99-120 (London, Falmer).
- Teacher Development Unit (1996) *Student teacher's handbook 1(1st draft version*). Malawi Institute of Education, Domasi, Malawi.
- Teacher Development Unit (undated:circa 1997) MIITEP course handbook. Malawi Institute of Education, Domasi, Malawi.
- Teacher Development Unit (undated:circa 1997) Student teacher's handbook 4(1st draft version). Malawi Institute of Education, Domasi, Malawi.
- Vanbelle-Prouty R, and Miske S, (1997) Developing a gender-based approach to planning, In J Lynch, C Modgil, S Modgil (eds). *Education and development: Tradition and innovation: Equity and excellence in education for development.* Cassell, London.

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