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CHANGES IN GIRLS' LIVES

Malawi from 1990 to 1997

Joyce Wolf
Katherine Kainja

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CHANGES IN GIRLS'S LIVES: MALAWI FROM 1990 TO 1997

Joyce Wolf
Consultant

Katherine Kainja
Former Minister of Education, Malawi

November 1999

Commonwealth Secretariat
Marlborough House, Pall Mall
London SW1Y 5HX
United Kingdom

The World Bank
1818 H Street NW
Washington DC 20433
United States of America

Photography Credits: A. Vawda, World Bank, 1999 (top); C. Carnemark, World Bank, 1990 (bottom)

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Foreword

This country study is one of two studies jointly commissioned by the Commonwealth Secretariat and the Girls' Education Team of the Human Development Network of the World Bank. The second country study is of Balochistan, Pakistan, and is titled "Education Reforms in Balochistan, 1990–1998." In commissioning these studies, we were seeking to examine the process by which education policies targeting girls were implemented and to assess whether the desired outcomes were achieved. We were also especially interested in examining whether, and how, policies aiming to improve education quality and curriculum relevance had taken account of the gender dimension. Where serious efforts are being made to increase girls' school enrollment rates, it would seem appropriate to simultaneously work to ensure higher retention rates of girls. Ensuring that curriculum content and instructional practices are appropriate and supportive of girls is key to consolidating the gains made through increased enrollments.

There exists a vast amount of research which confirms that gender and school quality are dependent variables and that gender equity is linked to quality of education. Gender-appropriate curriculum is usually referred to as having more females shown in professional roles in the books; an equal proportion of female and male role models in mathematics and science subjects; and men shown in less conventional roles, such as helping a wife in the kitchen or assisting daughter with homework. Therefore, while reviewing the educational reforms, these two studies would especially focus on curriculum improvement in terms of gender and quality.

Balochistan has made significant progress in terms of overall primary education improvement and gender equality in education management structure, the study revealed that gender issues were only very marginally addressed under initiatives to improve educational quality and instruction. This was in spite of the very significant efforts put into quality improvements. The current curriculum at the primary education level demonstrates major improvements, in terms of multigrade teaching and activity-based learning. Although revisions in textbooks were made, very little attention was paid to ensuring that greater coverage was given to girls' and women's activities and interests. As is mentioned in the case study, the major concern of the government in Balochistan was to provide some kind of training to its untrained teachers. Basic skills upgrading was provided with considerable effort, but the inclusion of training on *gender issues* in the classroom was very secondary to efforts to simply upgrade basic subject knowledge. In Malawi, however, special measures were made to revise the curriculum and a Gender Appropriate Curriculum Unit was established to assist in this process. The purpose of this unit was to revise textbooks and ensure that new materials supported girls' self esteem and were free of gender biases. But the dramatic increases in primary schools enrollments following the abolition of school fees required the government to focus more on providing condensed teacher training courses to newly recruited, and largely unqualified, teachers than on gender sensitive training. Thus, despite good intentions, many of the new teachers in Malawi entered the classrooms with little if any understanding of gender issues.

The findings of these two country studies show that very real and significant progress is being made in improving girls' access to education. They also reveal, however, that there is a real need to shore up these achievements with efforts to improve the quality of education and ensure that both instructional content and instructional methodologies are adapted to be more appropriate and consistent with girls' and their families' educational expectations. It is clear from these case studies that this can present special challenges. Improving educational quality is difficult in and of itself. Ensuring that gender issues are incorporated in improved curricula

and instructional methodologies is even more challenging. There is obviously a role here for international and donor agencies.

Some research studies have indicated that mathematics is perceived as a barrier to learning science (especially physical sciences) and technology by girls. Recognizing this problem, the Commonwealth Secretariat organized a pan-Commonwealth symposium on the topic. The symposium revealed that very little in the way of substantiated evidence is available to support any response to this question. However, the symposium recognized that the difficulty faced by girls was not due to the nature of mathematics, but by the way mathematics curriculum is packaged and delivered. As a follow up, the Commonwealth conducted a study on Gender Sensitivity in Primary Mathematics in India. A series of primary grades (I to V) mathematics textbooks of India was analyzed which revealed that a composite picture builds of active males with money, possessions, and leisure, all of which depend on the unacknowledged work but acknowledged trivialities of the domesticated female who appears half as often throughout the series, doing much less valued things.

Through different regional meetings organized by the Commonwealth Secretariat, it was discovered that an outdated, stereotyped attitude was one of the biggest barriers to women entering science- and technology-related professions. On the recommendations of these meetings, the Commonwealth Secretariat decided to:

(i) Publicize women scientists and technologists to serve as role models to girls in schools to challenge the stereotyped assumptions of their parents and teachers.

(ii) Initiate Girls' Science Clinics in Ghana. In the beginning of an academic session, about 200 girls from all over Ghana are brought to a camp for a week. A large number of eminent women scientists and technologists from different parts of Africa are invited to deliver lectures on popular topics of science and technology. The girls were also provided the opportunity to talk to the scientists and technologists on a one-to-one basis so that they could clear their doubts and apprehensions both about the subjects and influence of science related careers on family life. During the week the participants were also taken to different science- and technology-related research institutions and establishments, including industries where opportunities were provided to them to operate instruments. This had a positive effect on the enrollment of girls in science and technology.

Another program which again focused on the importance of role models in motivating girls to learn science and technology and take up related careers was the Science and Technology Road Show held in Botswana. The road show was conducted to:

(i) Convince women and girls that they could succeed in many more areas of employment if they sought appropriate qualifications and training in science and technology.

(ii) Make an impact on the attitudes and myths which prevent girls and women from taking advantage of today's opportunities in science and technology.

(iii) Provide information to parents, teachers, employers, and the public in general on the country's need for scientific and technological manpower and to encourage them to change their attitudes towards women in these fields.

The Botswana Road Show led to the development of a manual which could help others in organizing road shows of this kind and a video film entitled "Righting the Imbalance."

Introduction

In November 1997, under the guidance of a Community Development Assistant, we visited a randomly selected village about an hour from the main road connecting the two major cities in Malawi. We talked to teachers, school committee members, and the headman of the village.

The village headman reported that he had not educated his older daughters, but now he had a daughter in secondary school. When we asked what he thought she might do with her education, he said that he would like her to get a job. If that didn't happen, however, she could take over his chicken operation. Raising and selling chickens required math, and he thought she would be better at it than he was, since he had only an eighth grade education. We noticed this daughter listening closely to our discussion, and asked her if running a chicken farm sounded like something she would like to do. She answered that it would be all right, but what she really wanted was to become a pilot.

A pilot? In a country where less than 3 percent of girls went to secondary school in the early 1990s? How did this girl in a rural village not only make it to secondary school, but get the idea that she might become a pilot? This study will explore the changes that have occurred in Malawi since 1990 that have given girls like this a secondary school education and such aspirations.

Economic and Social Conditions in Malawi

Malawi is one of the poorest countries in the world. Its economic and social indicators are among the lowest in sub-Saharan Africa, and in 1994 the UNDP Development Index ranked Malawi 161 out of 175 countries. In 1994, the fertility rate was 6.6 percent and the population growth rate 3.2 percent. In 1964, Malawi's population was about 4.5 million; now it is almost 10 million.

With limited cultivated land, Malawi is also one of the most densely populated countries in the world, averaging 171 persons per square kilometer. Malawi's high population growth and density have created pressures on land, water resources, and agricultural conditions nationwide. These pressures have led to increasing problems of poverty, food security, declining availability of arable land, and severe environmental degradation.

Malawi has one of the highest infant and child mortality rates in the world. The 1992 Demographic and Health Survey indicated that nearly half of all children under age five are moderately stunted and about half of these are severely stunted. HIV and AIDS have increased rapidly in Malawi. It is estimated that 12 to 14 percent of the adult population is seropositive; 500,000 to 600,000 deaths from AIDS are expected by the year 2000.

Table 1. Economic and Social Indicators in Malawi and Neighboring Countries, 1995

	GNP/Capita ($US)	*Infant Mortality Rate (per 1,000 live births)*	*Life Expectancy*	*Adult Literacy Rate (%)*
Mozambique	80	113	47	40
Ethiopia	100	112	49	35
Tanzania	120	82	51	68
Burundi	160	98	49	35
Malawi	170	133	43	66
Rwanda	180	133	46	60
Uganda	240	98	42	62
Kenya	280	58	59	78
Zambia	400	109	46	78
Angola	410	124	47	—
Zimbabwe	540	55	57	85

Source: World Bank 1997.

Education in Malawi

Most Malawians support themselves by fishing, subsistence farming, and wage work on tobacco and tea estates. Since little education was seen as necessary for these roles, very few pupils traditionally completed the eight standards of primary school and went on to secondary school. Compared to other countries with similar economic conditions, Malawi's primary school enrollment is low and secondary school enrollment is extremely low (Table 2). In addition, disparities in education across income levels are extreme. In 1990, the poorest group of Malawians had only 30 percent net and 60 percent gross school enrollment rates, while the richest group had 75 percent net and 110 percent gross enrollment rates (Household Expenditure and Small-Scale Economic Activities Survey, 1990-1991).

Table 2. Education Indicators in 1992: Malawi and Neighboring Countries

	Malawi	*Neighboring Countries*	*Countries with Similar GNP/Capita*
Primary net enrollment (%)	48.0	55.7	66.2
Primary gross enrollment (% of age group) total	66.0	81.0	78.7
Primary gross enrollment (% of age group) female	60.0	56.4	72.4
Secondary gross enrollment (% of age group) total	4.0	24.8	18.9
Secondary gross enrollment (% of age group) female	3.0	19.8	15.0

Source: World Bank 1996b.

Malawi's primary schools have large and overcrowded classes, insufficient and decaying buildings, and an inadequate number of teachers. The shortage of classrooms and teachers has been intensified by a grade repetition rate of 20 to 25 percent, translating into an average of 15 pupil years to produce one primary school graduate. Only a little more than one-third of the pupils who enrolled in Standard 1 during the 1990s remained in school by Standard 8. In 1990, the combination of high numbers of dropouts and the high repetition rates, especially in the lower standards, has a dramatic impact on the number of pupils who graduate from primary school. Repetition rates are highest in Standard 8, which pupils often repeat again and again to improve their scores on the Primary School Leaving Certificate Examination, hoping to be selected for secondary school. The total gross enrollment rate of secondary school is less than 5 percent.

In an attempt to reduce the high repetition rates in Standard 8, the government of Malawi adopted a policy penalizing repeat pupils in that standard. Beginning in 1992, 75 percent of the places in secondary school were allocated to pupils who had not repeated Standard 8 and another 20 percent to pupils who had repeated Standard 8 once. Only 5 percent of the spaces went to pupils who had repeated Standard 8 two or more times. As a result of this

new policy, the number of pupils repeating Standard 8 dropped 55 percent in 1993 to 19,717, down from the 36,144 repeaters in the previous year.

In spite of overcrowded school conditions, the Malawi government began to eliminate fees for primary school in 1991, hoping to gradually make education accessible to all children. Tuition fees for Standard 1 were abolished in 1991, Standard 2 fees were terminated in 1992, and Standard 3 fees ended in 1993. As a result, Standard 1 enrollment increased from 380,159 pupils in 1990 to 533,553 in 1991. Enrollments continued to increase in Standard 1 over the next two years, but at a much lower rate of 10 percent. This was similar to the rate of enrollment increase in Standard 2 in 1992 (9 percent) and Standard 3 in 1993 (9 percent).

In 1992, the government also sharply increased the national budget for education, from 8 percent to 20 percent of the total budget, to support the greater number of students and further the goal of increasing access to school. As a result, the average expenditure per pupil rose from MK39.1 in 1990 to MK51.5 in 1992. According to then Deputy Minister of Education Catherine Kainja, some funds from the health ministry were reallocated to the education ministry because, as she argued at the time, increasing the number of children in school would commensurately reduce the need for health expenditures. The large increase in education spending was also made possible by the fact that a number of international donors were offering incentives to encourage the government of Malawi to allocate more money to education. UNICEF, for instance, had offered to increase the UNICEF grant to Malawi by 20 percent if the government increased the education budget to 20 percent, while some USAID funds to Malawi were conditional on increases in education spending.

Although fluctuations have occurred since then, the government's financial commitment to education has remained strong. Education was allotted about 25.2 percent of budget expenditures in 1997. Even with the large increases in primary school enrollment after 1991, the annual per pupil expenditure in Malawi remained relatively high at MK45.5 in 1997. Although this represents strong support for education relative to other government expenditures, MK45.5 was still only $2.80 per pupil, well below estimates of the amount needed to meet minimum school standards.

The most dramatic of the changes that occurred in Malawi's education system during the 1990s has resulted from the new, democratically elected Malawian government's decision to make primary education available to all children by eliminating tuition fees. The new government announced in June 1994 that all primary tuition fees would be abolished at the beginning of the new school year in October 1994. In response to the advent of what came to be known as "free education," a flood of over one million additional students entered the primary system in the 1994–95 school year, increasing enrollment by approximately 50 percent, from 1.9 million to 2.9 million pupils.

Table 3. Change in Selected Education Indicators in Malawi, 1988 vs. 1995

	1988	*1995*
Expenditure per student (1991 MK prices)	40.00	45.50
Pupil to teacher ratio	68.50	58.80
Percent of qualified teachers	100.00	67.00
Pupil to classroom ratio	77.30	134.20
Textbook to pupil ratio	1.84	1.21

Source: Ministry of Education Statistics, Government of Malawi, 1988 and 1995.

Malawi's dramatically higher school enrollment strained an already struggling system and posed a significant challenge to educational quality. It also led to an often-unmet need for comparative increases in the number of schools and classrooms. Increasing numbers of classes met under trees due to the lack of classrooms, which led to high absenteeism during the rainy

season. The pupil dropout rate increased by approximately 10 percent since 1992, in part a response to these difficult new conditions.

To cope with this influx of students, the government hired more than 20,000 new teachers, a 75 percent increase over the existing primary teaching force. Some of these were retired teachers, and others had never taught before. All received only three weeks of training before being dispatched to schools, leaving many with only minimal teaching skills.

Because the advent of "free education" occurred in conjunction with even broader political changes in Malawi, the term has come to mean more than just the absence of school fees. Some pupils interpret "free education" to mean that they are now "free" to do whatever they want. Discipline has deteriorated in classrooms as pupils challenge the authority of teachers. Free education has also been interpreted as guaranteeing everyone a place in school, regardless of his or her behavior, age, or ability. For many parents, free education has come to mean that they don't need to serve on school committees, pay fees for the upkeep of the school, or provide labor to build or restore classrooms. Some children have even argued that free education implies they are free to choose not to go to school.

While a more gradual approach to increasing school access might have created fewer problems, it is difficult to imagine how this could have been achieved in the context of rapid political change in 1994, following decades of limited access to education. The overwhelming response to free primary education may indicate more than just the removal of a financial barrier; it coincided with a new government and a new vision for the country. New attitudes about education—who controls it, how, and what the goals of education should be—are spreading in Malawi. From some perspectives, these attitudes are seen as creating havoc in the education system; from other perspectives, they are seen as recreating the system to be more equitable, democratic, and decentralized.

Girls' Education

Girls' Access, Persistence, and Achievement in 1990

Historically, fewer girls than boys have gone to school in Malawi, girls' dropout rates have been higher, and their achievement rates have been lower, especially in mathematics and science. An estimated 75 percent of Malawian females over 15 years old were illiterate in 1990, with rates varying widely by district, from 53 percent to over 90 percent (Government of Malawi Office of Statistics 1990). Significantly, however, women accounted for almost 80 percent of the enrollment in adult literacy classes, a testimony to their interest in education and willingness to educate themselves.

Table 4. School Enrollment of Girls and Boys, 1990

	Girls	*Boys*
Primary School Standard 1 Enrollment	181,831	198,328
Primary School Standard 8 Enrollment	39,812	71,914
Passed Primary School Leaving Certificate Examination	29,608	63,005
Secondary School Form 1 Enrollment	2,923	5,584
Secondary School Form IV Enrollment	2,336	4,564

Source: Ministry of Education Statistics, Government of Malawi, 1990.

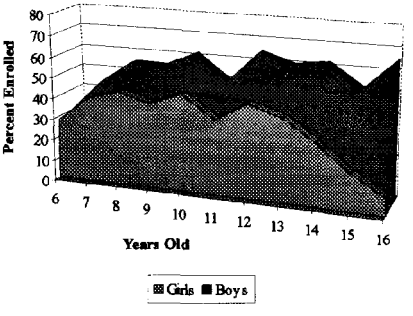
In 1990, girls represented 44.6 percent of primary school students in Malawi, 52.1 percent of primary school dropouts, and had a repetition rate of 20.4 percent. Although the number of students that continue on to secondary school after Standard 8 drops off dramatically, girls have made up at least 33 percent of the entrants to secondary school since

1992. This is the result of a government policy begun in that year requiring separate secondary school selection criteria by sex, adjusted so that approximately one girl was selected for each two boys. This means that a slightly higher percentage of girls than boys (10 percent vs. 9 percent in 1990) are selected for secondary school from among those students who pass the Primary School Leaving Exam. It has also meant that the minimum exam score for selected girls may be lower than that for boys.

Attitudes about Girls' Education

While most families in 1990 saw school as a place to prepare boys for entry into the modern economy, they saw school as preparing girls to be wives or mothers rather than for employment. In Malawi, boys have more opportunities for jobs, and women in low-wage jobs have much higher education level than do men in similar jobs, which sends the signal to parents that education will do less to help girls than boys. In research conducted in 1991, some mothers could not think of one reason why their daughters should be in school (Kapakasa 1992).

Figure 1. Enrollment by Age and Sex, 1990



Source: Robinson and others 1994.

Girls in villages tend to start school very late and progress very slowly. The official age of entry is six, but many children do not begin school until they are 10 or 11, which means that many girls in Standards 1 or 2 are already on the brink of puberty, initiation, and marriage. Parents worry about their daughters becoming pregnant while in school and often prefer to keep them safe at home. Because pregnant school girls were permanently expelled from the school system until 1993, parents were discouraged from sending girls to school given the chance that their investment in her could so easily be wasted.

Research in the early 1990s found that parents did not strongly encourage girls to continue in school, especially after initiation (Burchfield and Kadzamira 1996; Hyde and Kadzamira 1994). Most girls did not expect to be educated beyond primary school, especially since they hoped to marry and often believed men did not want educated wives. Research also indicated that both parents and children saw boys as more intelligent than girls (Table 5).

Table 5. Answers to the Question: "Who is More Intelligent? Girls or Boys?"

	Parents' Responses (%)		*Pupils' Responses (%)*		*Percent of*
	Mothers (74)	*Fathers (59)*	*Girls (40)*	*Boys (40)*	*Total*
Boys	70.2	68.4	85.0	82.5	76.6
Girls	8.1	19.3	5.0	7.5	10.0
Both are equal	21.6	12.3	10.0	10.0	13.4

Source: Davison and Kanyuka 1992.

Initiation for a girl often leads to role conflicts because, after initiation, she is considered to be a new person, a change that can lead to no longer believing that she should be in school. In addition, initiation ceremonies sometimes clash with the school year, and the girls who withdraw from school to attend initiation classes, which can go on for months, often have difficulty catching up with the content covered during their absence. Kapaskase (1992) pointed out that parents were willing to spend more for the initiation of their daughters than for

schooling, believing that the academic curriculum had little relevance to the girls' daily lives, while initiation was a necessity.

Girls in rural areas often lack female role models, especially those who have received an education. When asked to identify a woman who they wanted to be like when older, most of the school girls interviewed in 1991 failed to identify anyone. Seventy-three percent of them said that there was no one in their community whom they admired, and 91 percent said that there was no one admired outside their community (Burchfield 1996).

Malawian Interest in Girls' Education

These attitudes to girls' education are changing rapidly in the 1990s, due in part to efforts begun in the 1980s by Malawian women with political and institutional power. Representatives from Malawi to the United Nation's World Conference on Women in the 1980s brought back with them the goal of establishing institutions in Malawi that would work to improve women's status. In 1984, the National Commission for Women in Development was organized under the Ministry of Community Services, and in 1985, the Chitukuko Cha Amayi m'Malawi (CCAM), was established. In addition, a coordinating body for women's issues was set up under the Office of the President and Cabinet, while a group of women working in education formed an informal task force on gender. Acting in a watchdog role, this task force uncovered Ministry of Education policies that were detrimental to girls' education and acted as liaisons to the National Commission on Women in Development. These groups commissioned studies to clarify the status of women in law, education, health, agriculture, and the economy. In the area of education, they worked to secure more places for girls in secondary schools and boarding schools, while seeking to broaden areas of study available to girls.

Members of these organizations included women in government, academia, and those closely linked to men in powerful positions. The Women's League, which had been established primarily for political reasons, became a valuable resource. Participants at the League's annual meetings, who came from communities all over Malawi, were encouraged to discuss problematic areas of their lives. From these discussions, members of the National Commission on Women in Development began to compile data identifying key factors constraining the achievements of girls and women, including those having a negative impact on girls' education. The Commission took on the task of attempting to identify issues and propose solutions, which might then be implemented by the Malawi government or by international donors.

In 1988, a research paper presented at the National CCAM Seminar highlighted the status of girls and women in education. In 1990, at a regional conference in West Africa, the National Commission on Women in Development presented their research into girls' education at a workshop on "Increasing Access of Girls and Women to Education and Training Opportunities in Malawi." Many of the issues identified in these meetings became the basis for education reforms in Malawi during the 1990s. The 1990 workshop report, for example, included the following recommendations (National Commission on Women in Development 1990):

- The direct costs of education prevent girls from attending school. The Ministry of Education and Culture should offer free education, beginning the first phase in the 1992–93 academic year.

- School curricula need revision to enhance the performance of girls, encourage self reliance, and eliminate gender-biased material. While the current review of curricula is in progress, the Ministry of Education and Culture should include these revisions.

- In some districts of the country, initiation ceremonies take place during the school session. The Ministry of Education and Culture should utilize the party machinery and traditional and religious leaders to educate the public on the need to have these ceremonies during school holidays.

- Some initiation ceremonies have negative implications for girls' education. The Family Welfare Council should begin an examination of the ceremonies, involving birth attendants, traditional leaders and church leaders in the process.

- The incidence of female pupils leaving school due to pregnancy is high, and once dismissed, these girls have no chance of being readmitted into the school system. The Ministry of Education and Culture should review its pregnancy policy and give these girls a second chance at least once during their education.

- A relatively low number of female students go on to secondary school. The Ministry of Community Services should increase assistance to female secondary school students and raise the quota for female pupils from 33 to 50 percent within five years.

- While not everyone in Malawi was interested in gender issues in education, enough people became involved in these issues during the 1980s to lay the groundwork for significant changes in the 1990s. It is also clear that Malawian interest in the issue predated the advent of donor support for girls' education in Malawi.

International Interest in Girls' Education

Another factor which played an important role in the focus that was placed on girls' education in Malawi was the importance that this issue achieved within the international development community during this period of time. In 1991, Lawrence Summers (then a World Bank official) declared that, "Educating girls quite possibly yields a higher rate of return than any other investment available in the developing world," a statement that both summed up and stimulated the importance the issue was taking on among international development donors. Additional impetus to improve girls' education came from the international Forum for African Women Educationalists, composed of female ministers of education and female university presidents.

The international recognition given to this issue coincided with the government of Malawi's efforts to improve girls' education and brought Malawi favorable attention and international support for these activities. The international interest in Malawi's attempts to alter educational conditions for girls in turn helped to motivate Malawi's Ministry of Education to pursue reforms and support donor interventions designed to foster girls' access and persistence in school.

Strategies to Support Girls' Education

Improving Girls' Access to Education

In 1990, only about 60 percent of primary school-age girls were in primary school, and only 3 percent of girls of the appropriate age were in secondary school. Of those in school, girls made up 45 percent of the pupils in primary school and 34 percent of those in secondary school. Over the next seven years, the government of Malawi, with the support of a number of donors, set about to increase the number of girls receiving an education.

By 1997, the number of girls enrolled in primary school was twice the level as in 1990, while their share of enrollment had increased from 45 to 48 percent during the same time period (Table 6).

Table 6. Girls' Enrollment in Primary School, 1990 vs. 1997

	1990	*1997*
Total primary school enrollment	628,706	1,384,784
Girls' share of enrollment	45%	48%

Source: Ministry of Education Statistics, Government of Malawi, 1994 and 1997; Barcikowski 1998.

Over the same seven-year period, the number of girls in Form I of secondary school rose slightly, from 34 percent in 1990 to 37 percent in 1997. Changes in girls' secondary school enrollment are more difficult to analyze, since the government required that girls make up at least 33 percent of secondary enrollment throughout this period.

When girls' primary school enrollment in Malawi is compared to girls' enrollment in other low-income countries, Malawi's achievement becomes more apparent and impressive.

Malawi has made these strides in girls' enrollment using a combination of strategies. For primary school girls, important factors have included fee waivers for girls and an increase in the number of school facilities and places for girls. Many new female teachers have also been encouraged to enter the school system. At the secondary level, a scholarship program for girls is helping to boost enrollment. These strategies are described in more detail below.

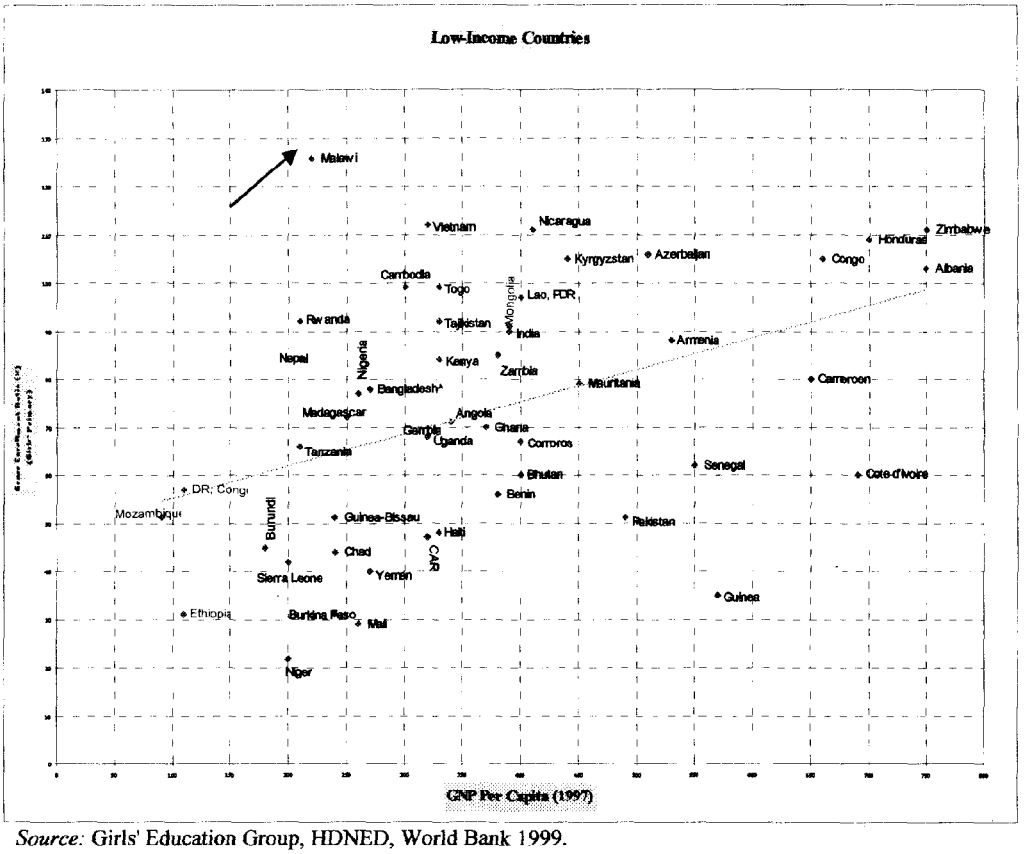
Fee waivers for primary school girls

Among the papers presented at the 1990 workshop were studies indicating that "lack of school fees" was a major reason given for girls dropping out of school (Davison and Kanyuka 1992; Kainja 1990) and research indicating that, when household funds became scarce, money for girls' education was often sacrificed ahead of other expenses (Kainja and Mkandawire 1990). Annual primary school fees in 1990 amounted to MK3.5 per child (about $1.35 at the time), a major sum for many subsistence farming families, who make up about 80 percent of the country's population.

The government of Malawi began phasing out primary tuition fees for both boys and girls in 1991, eliminating Standard 1 fees in 1991, Standard 2 fees in 1992, and Standard 3 fees in 1993. In addition, the US Agency for International Development (USAID) program in Malawi addressed the problem of fees by providing nonproject assistance to the government of Malawi to support a policy of fee waivers for all nonrepeating girls in Standards 2 through the end of the first educational cycle. These grants covered not only government tuition, but also local school fees and some other educational expenses. The goal was to support a cadre of girls through primary school, thus demonstrating girls' abilities, altering expectations, and developing successful role models for other girls.

The government fee waivers had an immediate, positive impact on access as Standard 1 enrollments increased as much as 40 percent in some school during the first year they were introduced. However, the government estimated that about half of that increase was lost at the beginning of the second term when collections were made for nontuition fees.

Figure 2. Malawi's Education Standing Relative to other Low-Income Countries



Source: Girls' Education Group, HDNED, World Bank 1999.

Almost all families had daughters, so almost everyone benefited from the new fee waiver policy for girls. During the first year of tuition waivers, girls' enrollment in Standard 1 surpassed boys' for the first time. This did not mean that the was not controversial, as many communities challenged the idea of giving fee waivers to only girls and not boys. The controversy, however, helped to spread awareness of the issues behind supporting girls' education. Not only did the removal of fees increase girls access to schooling, but removing fees that had been seen as an obstacle by most of population was a popular act. In the elections that occurred several years later, President Banda's party used the fee waiver as an indication of their generosity and concern, while an opposing party ran on a platform proposing the removal of all school fees. by the government.

The data in Table 7 indicate that removing school fees does not always have a uniform impact. For example, the gradual elimination of fees, standard by standard, begun in 1991, did not create the wave of pupils that hit the schools with the removal of all fees in 1994. The extensive publicity that accompanied the advent of "free schooling" in 1994, in contrast to the less publicized and gradual fee removal begun in 1991, may account for some of the difference in response. The general optimism and excitement accompanying the 1994 elections may have also helped to trigger the giant increases in enrollment. Whatever accounts for the difference, it is clear that removal of fees involves more than just the elimination of a financial barrier.

The USAID-supported fee waivers for nonrepeating girls in Standards 2 through 8 were also implemented with substantial publicity. While not all responses were favorable—schoolboys in one village went on strike because they were excluded from the waivers, and parents in many communities refused to continue paying fees for boys—the debate made people more aware of gender issues in education and resulted in increased female enrollment.

As Table 7 indicates, girls' enrollment in most standards increased more rapidly than boys' enrollment during the years of USAID fee waivers, even when boys were not required to pay fees.

Table 7. Impact of Eliminating School Fees, 1989–94

	Change in Enrollment from Previous Year (%)					
	Standard 1	*Standard 2*	*Standard 3*	*Standard 4*	*Standard 5*	*Standard 6*
1989						
Boys	9	13	11	8	12	4
Girls	8	13	10	13	12	12
1992						
Boys	0	4	4	9	7	14
Girls	9	18[a]	19[a]	11[a]	4[a]	8[a]
1993						
Boys	13	6	7	2	3	–53[b]
Girls	13	12[a]	7[a]	7[a]	4[a]	–40[a,b]
1994						
Boys	45	41	54	53	44	73
Girls	34	31	49	45	44	83

Notes:

a. Indicates implementation of the USAID-sponsored fee waiver for nonrepeating girls in Standard 2 through Standard 8.

b. Indicates implementation of government policy penalizing pupils who repeated Standard 8 prior to selection for secondary school.

Shaded areas indicate government's removal of fees for Standard 1 in 1991, Standard 2 in 1992, Standard 3 in 1993, and all standards in 1994.

Source: Ministry of Education Statistics, Government of Malawi, 1989–94.

Creating more school spaces for girls

Even before the advent of "free education" in 1994, it was clear that Malawi had too few primary schools to meet the needs of the country's children. To accommodate the major influx of new pupils in 1994, the government estimated another 38,000 classrooms were needed.

The World Bank, African Development Bank, and USAID supported the construction of additional primary schools and classrooms throughout the 1990s. Although these classrooms were for both boys and girls, they arguably had the greatest impact on girls, since boys generally received family precedence when school places were limited. Moreover, gender disparities were a major factor in the site selection for new schools. Greater distances to school have been shown to affect girls' access more than boys, so girls also benefited disproportionately because most of the new schools and classrooms were constructed in rural areas, bringing schools closer to a larger number of villages. And all new schools were equipped with latrines, the absence of which had discouraged girls' attendance more than boys.

During the 1990s, the World Bank also supported secondary school construction, including many new "day" schools. This helped to increase secondary school enrollment, which had been limited by a shortage of boarding schools, the traditional secondary school option in Malawi. Because a third of all secondary school places were reserved for girls, each new school meant more girls could receive a secondary education.

School construction in the 1990s did not go smoothly, however. The World Bank's initial primary school construction plan, for instance, required communities to mold bricks for the schools. But materials were often unavailable, leading to delays, higher costs, and a 29 percent shortfall in the number of classrooms. USAID's plan for primary school construction

also fell behind schedule because of resistance to changes in school design. In the mid-1990s, the World Bank began to focus on building just the foundation, walls, and roofs of new classrooms. Communities were then responsible for providing walls and windows. This approach limited construction delays and increased the community's sense of involvement in the schools.

Training more female teachers and improving teacher distribution

In 1990, women represented about 34 percent of all primary teachers in Malawi but only 20 percent of the primary teachers outside of urban areas (Moll-Druecker 1992). A shortage of female teachers inhibits girls' access to school in several ways. First, many parents are concerned that their daughters might be seduced or raped by male teachers. Female teachers also provide valuable role models in communities where the usefulness of female education is often not apparent to either parents or students.

Although Malawi has a chronic shortage of teachers, the country has long tried to maintain a well-trained and well-educated teaching force. The minimum official academic qualification for teachers in Malawi is the Junior Certificate of Education, awarded after completion of two years of secondary school. This relatively high academic requirement, in a nation with only a 3 percent gross secondary school enrollment rate for girls, limits the number of women who can become teachers. Another limiting factor has been a shortage of teacher training facilities. The Ministry of Education traditionally provided a two-year training course for primary teachers at one of eight residential training institutes. These institutes had a limited enrollment capacity of 2,960 teachers per year.

Table 8. Pupil–Teacher Ratios and Percent of Female Teachers by Standard, 1993

	Mean Pupil–Teacher Ratio	*Mean Percent Female Teachers*
Standard 1	93:1	95
Standard 2	85:1	91
Standard 3	69:1	72
Standard 4	54:1	81
Standard 5	52:1	67
Standard 6	48:1	54
Standard 7	35:1	58
Standard 8	31:1	39

Source: Wolf 1994 (unpublished data).

Beginning in 1989, in order to train more teachers, the World Bank supported a program to train teachers through short periods of intensive residential instruction during school vacations. Trainees received the equivalent of the standard two years of teacher training over a period of three months, while the rest of the year they were engaged in full-time teaching. This program has helped to train 3,918 teachers since 1989, one-third of them women as required by the program guidelines. One aspect of the program's success has been the relative maturity of the trainees, all of whom had teaching experience before entering the training program. It is considered so successful that Malawi's new teacher training system, created to train the approximately 20,000 teachers hired in 1994, was modeled on this approach.

Even with all these new teachers, however, classes well over 200 pupils can still be found in primary schools around the country. The government has tried to limit class size to 60 pupils per teacher, but the effort has been undermined by the pattern of teacher distribution within schools. Because schools are often judged by their success in admitting pupils to secondary school, head teachers often assign a disproportionate number of the most well-trained teachers to the higher standards. This leaves fewer teachers available in the lower standards, where the number of pupils is highest. Table 9, which shows the distribution of pupils and teachers in one rural school, is similar to the pattern frequently found throughout Malawi. Female teachers are generally assigned to the lower standards, which means that they habitually face enormous classes. Male teachers, on the other hand, are generally assigned to

the higher standards where classes sizes have become manageable. The rationale given by male teachers is that women are generally better at managing the "infants." The female teachers often see it another way: "Most of the males refuse to teach the infant classes"(Wolf and others 1999).

Table 9. Distribution of Teachers in a Typical Rural School per Standard

	S1	*S2*	*S3*	*S4*	*S5*	*S6*	*S7*	*S8*
Pupils	275	230	177	93	70	39	30	42
Teachers	1 female	1 male	1 male	1 male	1 female	1 male	1 male	1 male
Training	Untrained	Untrained	Untrained	Untrained	Untrained	Trained	Trained	Trained

Source: Wolf and others 1999.

In data collected from a sample of rural and urban schools, pupil–teacher ratios by standard and the placement of female teacher within the schools confirmed the significantly heavier teaching load in terms of class size faced by female teachers.

The shortage of trained female teachers in rural primary schools is made worse by constraints on female teacher placement. Married female teachers often move to cities to follow their husbands' urban careers, while unmarried female teachers are rarely willing to be assigned to a rural village. Rural girls frequently have no educated female role models, and even when female teachers exist, their placement in the lower standards limits their effectiveness and communicates a lower status.

Scholarships for secondary school girls

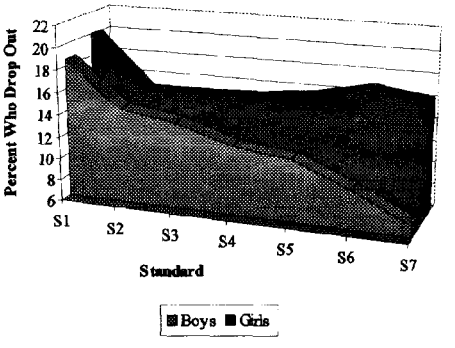
While girls' enrollment in primary school had, even in 1990, been close to the enrollment of boys, the girls' share of secondary school places has rarely exceeded the 33 percent required by the government. This is one-third of the 4 percent of the entire secondary school age population who gain access to secondary school, which means that a relativity minuscule number of girls in Malawi have ever attended secondary school.

Encouraging girls to continue their education beyond primary school is extremely important as many of the impacts associated with girls' education only appear after a secondary school education. In recent years, the prospects for education beyond primary school in Malawi have increased due to the rapid growth of Distance Education Centers (DECs). Many DECs have expanded to become local (nonboarding) secondary schools for Forms I and II. However, the lack of accreditation process and/or monitoring has meant that the quality of education offered at many DECs is often extremely low.

Beginning in 1995, in order to encourage girls to complete primary school and continue on into secondary school, the government, with the assistance of USAID, sponsored a scholarship program for secondary school girls. A Ministry of Education task force came up with selection criteria and a system for monitoring and evaluating the impact of the scholarships. Approximately 6,000 girls received scholarships in the 1995–96 school year, amounting to 17 percent of the estimated 35,000 girls in Malawi attending secondary schools or DECs. While only truly "needy" girls were eligible, this was not a difficult criteria to meet, since secondary school fees for one child often exceed the typical rural family's total cash income (Ilon 1996).

The program was redesigned in the second year, based on evidence that many eligible girls did not receive scholarships and the fact that the USAID money could cover many more girls than it had in the first year. For the 1996–97 school year, the Ministry of Education extended the scholarships to all nonrepeating girls in DECs and government secondary schools; some 42,900 girls received scholarships. While more girls were reached by the new approach, inequities and administrative problems were not eliminated. Funds were delayed in reaching many schools, procedures for applying were not well understood, and some new DECs appeared to be opening simply to take advantage of the scholarship money. The scholarship program is to be implemented over a four year period from 1995to 1999.

Figure 3. Boys and Girls Dropout Rates, 1990



Source: Robinson and others 1994.

Improving Girls' Persistence in School

In Malawi, keeping girls in school is often more difficult than helping them gain initial access. In 1990, 48 percent of all Standard 1 pupils were girls, but this number dropped to just 36 percent by Standard 8. Boys drop out at lower rates as they progress thought the system, while girls' dropout rates remain high throughout primary school.

Some strategies that increase a girl's access to schooling also improve the likelihood that she will remain in school. Creating more classrooms and more female teaching positions, as well as lowering direct and indirect costs of attending school, encourage girls both to enter school and to remain there. In 1990, for example, primary school fees not only limited the number of girls who entered school, but were also a major reason why they dropped out of school (Table 10).

Table 10. Girls' Reasons for Dropping Out of School, by Standard, 1990

	Standard 1	*Standard 2*	*Standard 3*	*Standard 4*	*Standard 5*	*Standard 6*	*Standard 7*	*Standard 8*
Truancy	13%	7%	8%	6%	9%	12%	11%	7%
Pregnancy	—	—	1%	1%	7%	5%	9%	9%
Marriage	—	—	—	—	3%	3%	3%	9%
Fees	85%	90%	87%	88%	85%	75%	67%	68%
Illness	1%	2%	3%	2%	1%	1%	8%	2%
No reason to continue	—	1%	2%	2%	—	—	—	—

Source: Ilon 1991.

In addition to these, there are other strategies that are specifically designed to keep girls in school. Malawi adopted several such measures in the 1990s. Their effect was becoming evident by 1997, when more girls completed more years of schooling than they did on average in 1990. In addition, a larger percentage of the pupils who completed all eight standards of primary school were girls by 1997. However, when the relative enrollments of girls and boys are compared within standards, it is clear that girls still do not persist at the same rate as do boys.

Table 11. Girls' Enrollments in Selected Standards and Forms, 1990 and 1997

	1990		1997	
	Enrollment	*Percent female*	*Enrollment*	*Percent female*
Standard 1	181,831	48	403,492	49
Standard 4	60,605	42	152,193	47
Standard 8	39,812	36	57,247	40
Form I	2,923	34[a]	3,847	37[a]
Form 4	2,336	34[a]	3,552	35[a]

Note:

a. Government selection criteria requires a minimum of 33 percent girls in secondary school.

Source: Ministry of Education, Government of Malawi 1990 and 1997; Barcikowski 1998.

Several of the more successful strategies to keep girls in school are examined below: adjusting the school policy concerning pregnancy, instituting a social mobilization campaign, and eliminating the requirement for school uniforms.

Readmitting girls after pregnancy

Another of the issues which merged from the 1990 workshop and other research into the reasons for the high rate of girls' school dropout was the role of pregnancy. The common practice in schools throughout Malawi prior to 1993 had been to require permanent expulsion of girls found to be pregnant. The policy had received extensive criticism for being discriminatory and inappropriately punitive from the Chitukuko Cha Amayi m'Malawi and other Malawian organizations as well as the National Commission for Women.

A new policy, which allowed girls to return to school one year after the birth of a child and dismissed schoolboys who impregnated girls for that same period of a year, was issued late in 1993 (Box 1). In addition, the cabinet approved two educational programs for implementation nationwide: "Why Wait" and "Guidance and Counseling." The "Why Wait" program focused on basic sex education for boys and girls, while the "Guidance and Counseling" program offered career guidance and advice on how to utilize free time.

Reactions to the new pregnancy policy were initially varied: the Ministry of Education put its support behind the new policy; community members were generally delighted, as almost everyone had female relatives who's educational careers had been blocked by pregnancy, but teachers, headteachers, and district education officials were often in opposition to the policy. Frequently they felt that allowing girls who

Box 1. Changing the Pregnancy Policy

In 1992, Kate Kainja was appointed Malawi's Deputy Minister of Education, with overall responsibility for female education issues. Within two weeks, she started receiving "requests" from the district education offices and headteachers of schools for dismissal of pregnant girls. "I was alarmed by the increasing number of girls' dismissal requests on my desk," Kainja said. "In the beginning I approved some dismissals, but then realized that the dismissal applications did not provide full information about girls' situations, including their academic standing. Therefore, new dismissal requests had to include the girls' name, schools' name, 'responsible' male (father), and scholastic record of the girl." A close study of academic records revealed that more than 90 percent of the girls being dismissed had above-average scores and that the school system was losing many girls with excellent potential because of its pregnancy policy. "I shared the pregnant girls' expulsion data within the Ministry, and a decision was made to bring it to the attention of the Minister."

In July 1992, at a seminar of educationists from sub-Saharan Africa, the education minister from Guinea explained that his country had faced a similar dilemma over pregnancy and education. The ministry had eventually abolished the policy of expelling pregnant girls from school and had taken measures to bring young mothers back to school. After hearing this, Malawi education officials organized three regional seminars in Malawi to bring together community and religious leaders, local education officers, teachers, parents, and counselors. After obtaining public support for changing the pregnancy policy, a paper was presented to the national Cabinet of Ministers, recommending that girls be allowed to return to school after childbirth. The national Cabinet, after heated discussions, approved the paper's recommendation.

had given birth to return to school would encourage sexual activity among the girls and returning girls would no longer be able to focus on school work. Because parents and their daughters had to take the initiative to have girls readmitted, the government used radio to directly inform communities of the policy change as well as notifying schools by circular. Communities often strongly supported the policy, one mother describing: "We heard about the policy on the radio. Everyone was dancing and clapping hands and saying, 'My child will be able to continue her education!'" (Wolf 1999). Over time, with pressure coming from both the community and the ministry, most teachers and local officials began to support the change. Even teachers who were initially skeptical report that girls who have returned to school after having a child tend to work harder and approach their studies more seriously than before their pregnancies. However, many teachers and parents are opposed to suspending boys who have impregnated girls, and in many cases, they allow these boys to remain in school. Although the new pregnancy policy was issued before the 1994 elections, many Malawians see it as a part of the "free education" movement that they interpret as meaning that no one can be kept out of school.

Social mobilization

In 1994, Malawi began a Social Mobilization Campaign (SMC) designed to bring girls into school earlier, so they could complete more of their education before initiation, pregnancy, and marriage become potential obstacles to schooling, and to keep them in school longer. With support from USAID, the SMC relied on university theater students to collect information from communities about barriers to girls' education. Community workers and local education officials then used this information to help communities alter attitudes and practices that added as constraints to girls' education.

The SMC has proved highly effective in uncovering specific local constraints to girls' education, increasing awareness about girls' education, training a cadre of social change experts who both understand the issues and the techniques to use in addressing those issues, and in empowering communities to develop strategies to support girls' education. Below are examples of specific barriers to girls' persistence in school which were discovered during SMC interactions with communities and the changes made by communities.

Establishing girls' clubs. One community was concerned about a 1996 shift in the school calendar that extended school vacation to more than three months. Parents feared that this long break would give their daughters too much time to engage in love affairs, money-making schemes, or other activities that might lead them away from school. With the help of the SMC, the community established a girls' club that gave primary and secondary school girls a chance to display their talents, mentor one another, and enjoy themselves in ways that did not impact negatively on their education. Although this community had experienced in the past a high female dropout rate after school breaks, the formation of the girls' club actually increased the enrollment of girls in the next school year. The lively meetings and allure of club membership even provided an incentive for some female dropouts to return to school.

Reforming girls' initiations. Many girls who undergo the initiation process during the school year miss large amounts of school as a result. Moreover, the intensive sex-role training that girls receive during initiation can lead to attitudes that are incompatible with remaining in school. When early research identified the importance of initiation in girls' lives, SMC invited initiation counselors to a workshop to discuss constrains on girls' education. The 70 initiation counselors who attended the workshop went far beyond discussion. They examined all of their teachings for impacts on children's attitudes about education. They identified the initiation teachings that discouraged education and replaced them with songs and sketches to promote education. They decided to tailor their teachings to the age of the children. Group inspectors

were appointed to train initiation counselors in these new approaches and help them incorporate this revised material. Later, ethnic groups in other parts of the country began to ask for help in determining whether their initiation practices pose barriers to girls' education.

Encouraging positive role models. Several studies in the 1990s revealed that most Malawian girls had few role models either within or outside their communities, and that most could not think of any person they wanted to emulate when they grew up (Hyde and Kadzamira 1994; Burchfield and Kadzamira 1996). Without role models, it is difficult for girls to identify careers or positions they might strive towards, and without such goals, it is hard to understand the need for education. The SMC project assisted communities in the process of identifying local female role models. On a broader scale, the SMC also helped to familiarize girls in Malawi with a variety of women who could serve as role models. One aspect of this campaign involved the production of calendars that featured one woman each month, including her picture and the story of her career. These calendars were distributed to education ministry personnel, NGO staff members, members of parliament, and every government primary school, secondary school, and distance education center in Malawi (Kendall 1997). The SMC also produced a series of six storybooks for pupils in Standard 6, each focusing on a Malawian woman: her career, her background, the people who influenced her, and those whom she influences. These books were distributed to every government primary school in Malawi. In addition, the SMC initiated a popular weekly radio program, "*Tosogolo la Atsikana*" (For the Girls' Future), which featured women discussing their lives and careers, including an open discussion of problems they had encountered in reaching their present positions. The radio show was heard throughout Malawi, sometimes receiving as many as a thousand letters per week from listeners (personal communication, Janet Robb, Director of SMC 1997).

Eliminating school uniforms

Studies conducted in the early 1990s identified the cost of school uniforms as a constraint to girls' education (Burchfield and Kadzamira 1996). School uniforms could cost as much as MK7, far more than primary school fees. In 1992, the Ministry of Education issued a policy stating that "...pupils should not be forced to wear any form of uniform but should be advised to put on simple and neat clothing" (Ministry of Education 1993). But many headteachers continued to turn pupils without uniforms away from school until 1995, when the government reissued its policy on school uniforms more forcefully, stating that pupils could not be expelled for failing to wear uniforms.

Implementation of the policy was more widespread in 1995, in part because the government announced the policy on the radio, thereby alerting communities as well as school staff. Because the policy addressed the resentment created by the previous practice of not allowing children who did not have uniforms to attend school, parents have generally liked the new policy and have appreciated the fact that they no longer had to spend money on uniforms. But the differences in how the uniform policy was implemented in 1992 and 1995 probably resulted from the changes that had occurred in the country during that period. A policy stating that children cannot be prevented from attending school because they lack a uniform corresponds with the removal of school fees as an obstacle to education and the changing attitudes about education and individual rights within a more democratic system. This point was made explicit in the 1995 policy statement, which began with the reminder that "You are aware that the newly elected Government of Malawi introduced free primary education in October 1994 in order to improve children's access to education..." (Ministry of Education 1995).

Nevertheless, there has been confusion over what the uniform policy actually is—no uniform at all or only that pupils can not be sent home for not having a uniform—and this, plus

the resistance of some schools to changing uniform practices, has led to great variation in implementation. Some teachers complain that they cannot tell a pupil without a uniform from a child who is not in school, which makes it difficult to tell if pupils are cutting school. Many teachers also believe that a lack of uniforms contributes to a lowering of behavior standards. In the schools where uniforms are no longer worn by a majority of the pupils, the tendency for girls more than boys to compete in how well dressed they are can lead to absences, and in extreme cases, may encourage some girls to drop out. Cases have also been reported in which girls have engaged in prostitution in order to secure the money for nice clothing to wear to school.

Improving Girls' Achievement in School

Although enrollment and persistence rates for primary school girls in Malawi have been increasing since the 1980s, gender inequities in learning opportunities still exist. These differences in opportunities eventually become differences in achievement. In 1990, 77.7 percent of boys in Malawi passed the Primary School Leaving Certificate Examinations, while only 66.8 percent of girls passed (Malawi National Examination Board). Girls did poorer in all subjects except Chichewa and Bible knowledge. Mean scores in verbal and numerical ability from the exam indicate the existence of these gender differences, as shown in Table 12.

Table 12. Mean Scores for Boys and Girls on Primary School Leaving Certificate Exams, 1990

	Boys	*Girls*
Verbal ability	37.9%	33.4%
Numerical ability	33.4%	28.0%

Source: Malawi National Examination Board 1990.

Research indicates that achievement in school is linked to many of the same factors that influence attendance and participation. Teachers hold the same negative attitudes about girls' abilities and roles in society as the culture in general, and these stereotypes affect the interaction between teachers and their female pupils. Curriculum and textbooks are riddled with gender stereotypes and biases that limit girls' identification and interest. Clerical and domestic responsibilities for schools are assigned to girls in greater numbers than to boys. And poverty-related factors, such as the demand for child labor, the incidence of temporary hunger, and the lack of instructional materials and adequate clothing, affect girls more than boys (Sey and VanBelle-Prouty 1997).

It is difficult to interpret changes in girls' performance within the context of other education developments in Malawi in the 1990s. In Table 13, for example, the fact that the number of pupils in Malawi almost doubled with the advent of "free education" in 1994 is probably related to the decrease among those who had enrolled in Standard 8 in the percentage of both girls and boys who took and passed the Primary School Leaving Certificate Examination between 1990 and 1997. The disruption, crowding, and increased pupil-to-teacher ratios would be expected to increase the number of dropouts, even in the final year of primary school, and decrease the amount of learning that occurs in schools. Yet even with a lower percentage of pupils taking and passing the examination, more pupils were selected to go on to secondary school. However, girls' performance continues to lag behind boys', both in their rate of completion of Standard 8 and in the percentage that pass the Primary School Leaving Examination.

Table 13. Boys' and Girls' Performance in 1990 and 1997

	1990		1997	
	Girls	*Boys*	*Girls*	*Boys*
Enrolled in Standard 8	39,812	71,914	57,247	87,672
Took PSLC exam	32,316	66,845	43,460	74,752
Percent enrolled who took PSLC exam	81%	93%	76%	85%
PSLC exam takers who passed	29,608	63,005	24,347	46,436
Percent passing	91%	94%	56%	62%
Selected for secondary school	2,923	5,584	3,847	6,456
Percent of passers selected	10%	9%	16%	14%

Source: Ministry of Education Statistics, Government of Malawi 1990 and 1997; Barcikowski 1998.

While reforms designed to improve girls' access and persistence can have an almost immediate impact, it takes longer to see results from reforms designed to improve girls' achievement. Although much remains to be done, the strategies described below are forming the basis for beginning to solve the long-term problem of raising girls' achievement levels in Malawi.

Gender-appropriate curriculum and textbooks

Persistent gender biases in curriculum and textbooks have been found to stifle girls' motivation and performance. A 1992 examination of the content and images of teaching materials in Malawi found considerably fewer images of females than males; some female images portrayed in negative ways in relation to male images; social stereotyping of women's aptitudes, potential, and social roles; females portrayed negatively or not at all in terms of employment; women's maternal image was consistently stressed; and generic nouns, such as the farmer, the scientist, or the teacher, were used to refer to males but not females (Moll-Druecker 1992). In addition, parents' limited career aspirations for their daughters tended to be reflected in the curriculum content. Gender-specific socialization of girls for domestic roles was pervasive throughout the curriculum, while career choices associated with girls were limited to nursing and teaching.

The government of Malawi began an extensive revision of the primary school curriculum in 1987, following a symposium involving the Ministry of Education, the Malawi Institute of Education (MIE), the University of Malawi, and several religious organizations. The symposium set in motion a 10-year revision of the curriculum, supported by several international donors. The World Bank supported new textbooks for mathematics, English, Chichewa, and social studies, while the German Technical Cooperation Agency provided input and funding for science and mathematics texts. USAID supported the process of making the curriculum and textbooks gender appropriate, while the World Bank and the Canadian International Development Agency helped with printing, transport, and distribution of the textbooks.

Timing was important to the gender review, as a revision of curriculum and materials would not generally be undertaken just to assure gender appropriateness. Joining an ongoing reform provided the ideal time to change the images of girls and women used in education materials.

The MIE established a Gender Appropriate Curriculum unit to oversee textbook revisions and ensure that new materials supported girls' self esteem and were free of gender biases. The materials were tested in the classroom before they were incorporated into textbooks and adopted in primary schools. Training workshops and curriculum revision committees have helped to sensitize the writers and the staff of the MIE and made many of them into strong advocates for an appropriate gender perspective.

Changing classroom practices

Classroom research shows that teachers' low expectations and negative attitudes about girls limit girls' potential to be successful pupils and participate in classroom activities. In a classroom ethnography study conducted in 1991, 90 percent of the teachers interviewed thought that boys performed better than girls in class and that girls lacked ambition and a spirit of competition (Davison 1992). In a 1990 survey, teachers reported approximately equal preference for teaching boys or girls, but the reasons behind their preferences were revealing. Those who preferred boys saw them as hard working, motivated, fast learners, competitive, and intelligent. Those who preferred girls saw girls as cooperative, easy to control, obedient, calm, quiet, and submissive (Kainja and Mkandawire 1991).

Teacher attitudes about girls are transmitted into the classroom by paying more attention to boys than girls, by positively reinforcing boys more than girls, by punishing girls who are assertive, etc. Boys often respond to teacher support by assuming dominant roles in the classroom. This can lead in extreme cases to classroom hazing by boys, whose insults and implicit or explicit threats silence girls in the classroom. But the attitudes and perceptions of teachers and male pupils are only one aspect of the problems faced by girls in school. Teachers frequently expect female pupils to sweep floors, fetch water, and clean latrines in the school. One recent study in Malawi found that boys received such chores as punishments while girls were routinely assigned these chores as daily responsibilities, sending strong messages about both the value of the tasks and comparative status in the classroom (Sey and VanBelle-Prouty 1997).

The Gender Appropriate Curriculum unit of the MIE has, in addition to carrying out reforms in curricula, created a training program to sensitize teachers to gender biases and provide classroom techniques for overcoming them. The gender unit has conducted training to help subject advisors, textbook writers, inspectors, teacher trainers, and senior education officials become more aware of gender issues in their policies and practices. A female teacher trainer who attended one training workshop noted that "It was a real eye opener. We had always thought of girls as less intelligent than boys. Now for the first time, we realized that it was not lack of intelligence but lack of opportunity" (personal correspondence of Dora Mwalwenje, director, Gender Appropriate Curriculum).

Regional and district education personnel have been trained with the expectation that they will then train local teachers. Unfortunately, due to a lack of time, transportation, and facilities, few of the trainees have been able to pass their experience on to teachers. In addition, the condensed teacher training course used to prepare the many teachers hired following the huge enrollment jump in 1994 allowed little time for gender sensitivity training. Thus, many of these new teachers entered the classroom with little if any understanding of the gender issues they would face or techniques for addressing them. Currently, the process of gender sensitization often breaks down before it reaches the classroom.

Gender streaming mathematics

Girls in Malawi commonly underachieve in mathematics and science at the primary level, and they are generally assigned home economics instead of science beginning in Standard 5. Compared to boys, girls in Malawi perform poorly on the mathematics exam at the end of primary school (Table 14). Differences in girls' and boys' performance in mathematics and science persist throughout secondary school. A passing grade in mathematics is a prerequisite for entry into various teacher training and technical colleges and also a requirement for science-based programs at the university level. In addition, the use of

mathematics scores as a means of selection often severely limits girls' educational and professional opportunities in Malawi (Grant Lewis and others 1990).

Table 14. Malawi School Certificate of Education Scores for Boys and Girls (%), 1989

	"Distinction"		*"Credit"*		*"Pass"*		*"Fail"*	
	Girls	*Boys*	*Girls*	*Boys*	*Girls*	*Boys*	*Girls*	*Boys*
Mathematics	0.52	3.85	11.01	26.58	19.35	28.08	69.11	41.49
Physical Science	1.99	5.66	18.12	32.01	32.61	32.95	47.28	29.38
English	0.19	0.52	38.11	48.23	46.02	43.17	15.67	8.08
Chichewa	10.85	10.40	64.18	61.85	22.41	25.71	2.57	2.04
Geography	1.72	11.79	26.09	42.44	44.91	37.06	27.28	8.72

Source: Grant Lewis and others 1990.

Classroom practices may be partly responsible for the relatively poor achievement of girls in mathematics. A study in Zambia found that girls lacked interest, motivation, and confidence in the study of mathematics, pupils believed that mathematics was a subject for males, both parents and teachers preferred male mathematicians, and teachers did not encourage girls to work on mathematics (Ndimbirwe 1995). The situation in Malawi appears to be similar. The expectations of teachers in Malawi that boys will do better than girls in math have led some teachers to address math questions only to boys in class. Teachers may be unaware of their own bias. In a recent classroom study in Malawi, for example, a Standard 2 teacher insisted that she treated girls and boys the same, but in the subsequent lesson she spent more than seven minutes working on math problems with boys and only 20 seconds with girls (Miske 1998). A persistent gender bias has also been found in Malawi's mathematics and science textbooks, guides, and examinations (Moll-Druecker 1992).

In many different countries, mean achievement scores in mathematics have been found to be higher in single sex schools than in coeducational schools. Comparisons in achievement between all-girl and coeducational schools in Malawi indicate that girls' performance is sometimes better in classes without boys. Two secondary schools in Malawi that had separated boys and girls for some classes found that both sexes improved their academic scores following the separation (Hyde 1993).

A pilot study that separated boys and girls in Standards 6 and 7 for mathematics instruction was conducted over several years in a number of primary schools large enough to provide two math classes (Hiddleston 1996). This study offered inconclusive evidence that gender streaming had increased achievement in mathematics, primarily due to the use of weak methodological and analytical techniques, but future research may provide a basis for supporting gender streaming in large primary schools.

Conclusion

Factors Creating Change

Why were girls' education reforms so successful in Malawi in the 1990s? A number of important conditions existed in Malawi during that time period. These, combined with the ways that this report has addressed, build a context within which change could occur.

First, the changes in girls' education were made during a time of major social and political change in the country. This atmosphere of change set the stage for reforms, including those involving girls' education, and the momentum of the era helped propel the reforms forward.

Second, powerful Malawian women had identified gender inequities as a social problem in the 1980s, and these women became important advocates on behalf of improving girls' education in the 1990s. The support and involvement of these leading women gave the movement to educate girls greater visibility and gave Malawian women and girls a sense of ownership and pride in the reforms.

International interest in girls' education grew during the same period as the reforms in Malawi. As a result, several major international donors supported and encouraged the Malawian efforts and played an important role in implementing the reforms in girls' education.

Finally, the government of Malawi introduced multiple strategies, policies, programs, and campaigns designed to have an impact on girls' education. The sustained effort, which approached the problems from many different angles, had a much greater and mutually reinforcing impact than one or two new policies would have had on their own. Moreover, the strategies to improve girls' education addressed a variety of problems including access, persistence, and achievement.

The Girl Who Wants to Fly

How the multiple strategies, policies, programs, and campaigns put in motion by the government of Malawi interacted can be seen by revisiting the village girl who wants to be a pilot. At the time she and her father were interviewed in November 1997, education reforms for girls had been underway for years and many had converged on this girl's life.

The father may never have had to pay school fees for his daughter. She had benefited from the gradual removal of school fees beginning in 1991, followed by the removal of all primary school fees with the advent of "free education" in 1994, and the initiation of scholarships for girls in secondary school beginning in 1996.

This girl and her parents would have heard the debates over the importance of girls' education that occurred throughout the country in the 1990s, including controversial decisions to target only girls for some fee waivers and scholarships. These debates created a better understanding of women's roles in society and the importance of education to those roles.

Due to policy changes in 1992, the would-be pilot knew that, if she became pregnant, it would not necessarily mean the end of her education. This meant that the traditional argument that there is little point in educating a girl because she will just become pregnant did not influence her educational decisions.

This girl is a member of an ethnic group that practices girls' initiation ceremonies; attitudes and practices associated with those who have been initiated can be detrimental to the continuation of education. But the initiation councilors in her district had already met and changed many of those practices before she reached initiation age. In addition, the timing for initiation, which can result in a girl missing a large part of the school year, had been adjusted to correspond to school vacation.

A community-based social mobilization campaign had been in operation throughout the country for three years. The headman and his daughter had no doubt heard about the importance of girls' education both indirectly and directly from a weekly radio show that focused on the stories of girls' lives.

Most of the curricula used in the girl's primary school had been recently revised, with careful attention paid to gender images. Moreover, the would-be pilot may well have used

readers in Standard 6 that told stories of educated Malawian women and the careers they created for themselves.

The headman's daughter's chances of being accepted to secondary school were enhanced by the government's policy of reserving 33 percent of the places in Form I (the first year of secondary school) for girls.

For two years she may have seen calendars on school or government walls showing a new female role model each month. In January 1996, the role model was a pilot. In April 1997, the role model was a chicken farmer.

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