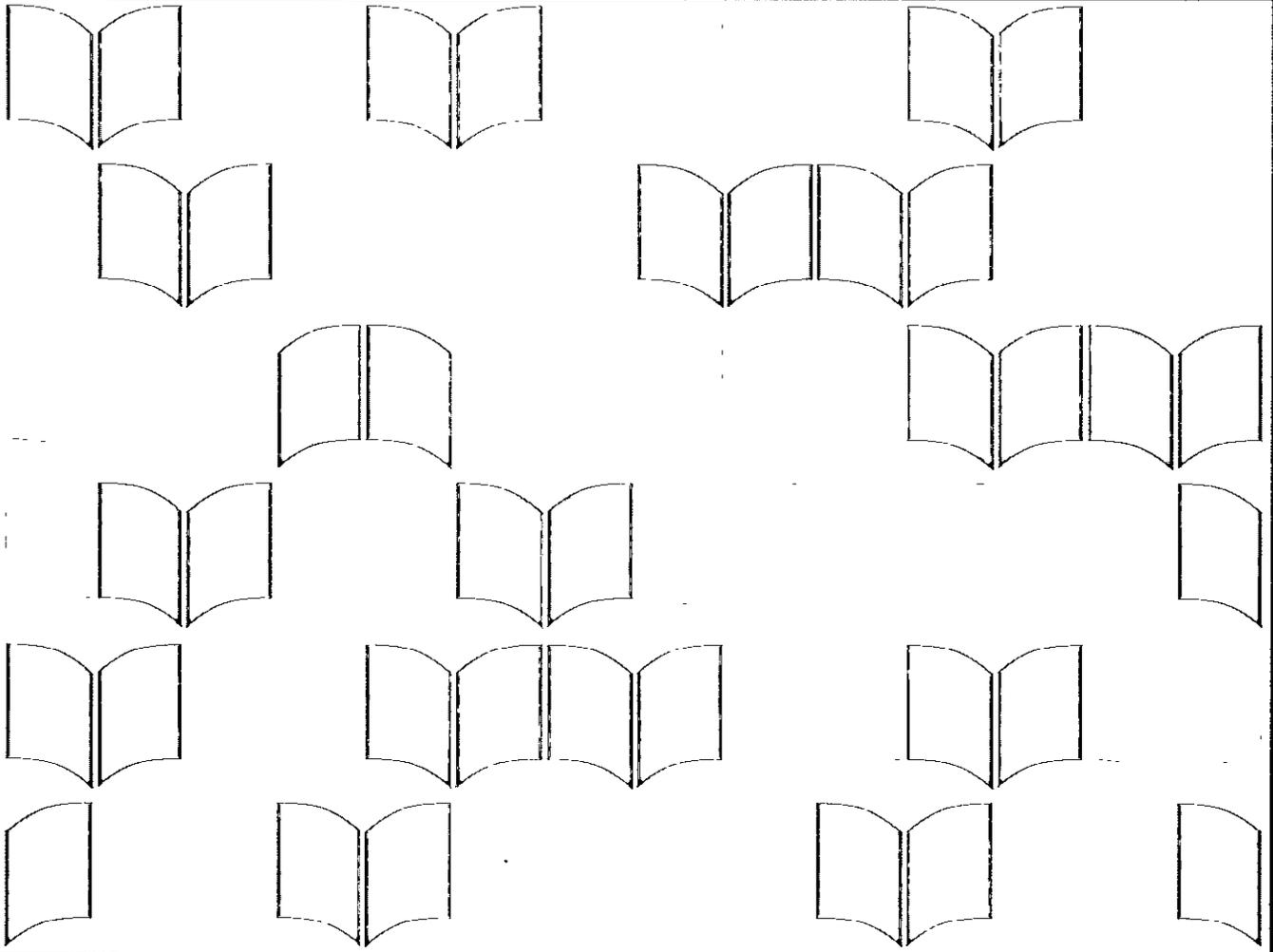


GIRLS' SCHOOLING ACCESS, PERSISTENCE AND SUCCESS IN MALAWI: A DESCRIPTIVE REPORT

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Girls' Schooling Access, Persistence and Success in Malawi:
A Descriptive Report

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I. DATA SETS

Three data sets were used in this analysis. The first was an annual survey completed for each primary school in the country of Malawi by the headmaster of that school. The second was preliminary data from the 1987 census which detailed aggregate educational attainment by district, sex and age. The third data set used in this analysis was results of the Secondary School Entrance Examination (SEE). Each of these is discussed below.

A. Primary School Annual Questionnaire

This questionnaire is the data set that appears in the Annual Educational Statistics. Most of the questionnaire, however, is never analyzed due to data processing constraints at the Ministry of Education and Culture. The questionnaire is comprised of eight tables. This data set contains parts of five of these tables - Table 1 (enrollments), 2 (drop-outs), 3 (physical facilities), 6 (textbooks) and 7 (teachers).

There are 23 rural school district in Malawi. From each of these district three schools were chosen at random. The random selection met the following minimal requirements:

1. The school had to be co-education in all standards.
2. The school had to serve all eight standards.
3. The school had to be an "assisted" (fully sanctioned) school.

One district (Nkata Bay) had only one school responding - this school is included. Thus, the data set is comprised of 67 assisted, co-educational primary schools.

Malawi divides its districts into three regional areas - North, Central and South. Table 1 shows the distribution of this sample by region.

Table 1 Breakdown of Sample by Region

| Region | Percent of Schools | Number of Schools |
|----------|--------------------|-------------------|
| Northern | 19% | 13 |
| Central | 36% | 24 |
| Southern | 45% | 30 |

B. Preliminary 1987 Census Data

The National Statistics Office provided rounded figures on educational attainment by sex and age. Ages were grouped. Data was used on two groupings: aged 5-14 (for estimates of percent of girls in district who have ever attended school) and 15-30 (for estimates of mother-aged women's school attendance). Data was available by district. Actual educational attainment was not available, but percent of females who had ever attended school could be derived.

From this data source an estimate was added to the data set of the school participation in the district of girls and their

mothers. It should be remembered that these estimates were aggregate by district and represent data that is four years old. Nevertheless, rough relative estimates of school participation are probably valid and actual estimates of participation rates are unlikely to change drastically in a four year period.

C. Secondary Entrance Examination (SEE) Scores

The Malawi National Examination Board (MANEB) provided data on SEE exam results for each of the schools. This data included the number of students who had taken and who had passed the SEE. The data was disaggregated by sex. From this, rough estimates of pass rates for boys and girls was derived and added to the data set.

It was not possible to estimate the percentage of children in Standard 8 who had actually taken the exam as, often, the number of children who were reported to have taken the exam exceeded the reported enrollment for the Standard. Since late arriving data gave actual listings of individual students and their test scores, it is assumed that the numbers reported by MANEB were accurate and pass rate estimates are reliable.

II. SAMPLE DESCRIPTION

The 67 schools in the sample contained 41,995 children in 649 classrooms. Total dropouts among this group number 8,872. Repeaters numbered 9,041. Table 2 shows a breakdown by Standard.

Table 2 Sample Breakdown by Standard, Sex, Dropouts and Repeaters

| Standard | Boys | Girls | Number of classes | Dropouts | Repeaters |
|----------|--------------|--------------|-------------------|------------|--------------|
| 1 | 5,710 | 5,240 | 100 | 4,234 | 2,813 |
| 2 | 4,288 | 3,626 | 92 | 1,617 | 1,542 |
| 3 | 3,671 | 2,849 | 83 | 992 | 1,043 |
| 4 | 2,403 | 1,971 | 77 | 634 | 684 |
| 5 | 2,081 | 1,585 | 75 | 504 | 575 |
| 6 | 1,660 | 1,103 | 71 | 336 | 438 |
| 7 | 1,364 | 822 | 70 | 236 | 380 |
| 8 | <u>2,481</u> | <u>1,101</u> | <u>78</u> | <u>319</u> | <u>1,626</u> |
| Totals | 23,658 | 18,297 | 649 | 8,872 | 9,041 |

III. WHO GOES TO SCHOOL?

A. Getting Girls Into School

Wide variation exists in the percentage of population (aged 5-14) that ever attended school. This trend is largely regional. Table 3 shows the regional (within this sample) of school attendance by girls.

Table 3 Regional school participation of girls aged 5 -14.

| Region | % of group attending | Std. dev. | Range | % of schools in areas of less than 20% atndance |
|----------|----------------------|-----------|--------|---|
| Northern | 86% | 4 | 80-92% | 0% |
| Central | 40% | 20 | 10-65% | 25% |
| Southern | 39% | 18 | 14-75% | 10% |

Aside from regional variations, the level of mother's education seems an important predictor of proportion of all girls who will be enrolled in school. This relationship was fairly pronounced ($r = .83$). Table 4 groups mothers by percent that have had some education and shows the percent of girls aged five to fourteen that have ever attended school.

Table 4 Percent of Girl's Aged 5-14 Who Have Ever Attended School by Percent of Mothers Ever Attending School

| Percent of mothers ever attending school | Percent of girls Aged 5- 14 ever attending school |
|---|---|
| 0 - 33% | 30.5% |
| 34 - 67 % | 43.4% |
| 68 - 100% | 71.4% |

This, of course, follows much of the literature from other countries - mother's with high levels of education generally have children with high levels of education. That this trend has been found within districts (the data did not look at individuals or households) speaks to the possibility that the trend is likely as much a part of local "traditions" or "expectations" as it is to the influence of given mothers.

B. Enrolling High Proportions of Girls

Standard 1: Sample wide, little variation existed in percent of Standard 1 attenders who were girls. An average of 40 percent of all Standard 1 students are girls. Among those schools where less than 40 percent of Standard 1 students are girls, all four were in the Southern region. School which enroll a higher percentage of girls in Standard 1 were more evenly distributed by region; of the five schools, two were in the Southern region, two in the Central region and one was in the Northern Region.

Throughout Primary School. Regionally, fairly even enrollment of girls was found through the schools - an average of 42% of enrollees are girls. Seven schools had female enrollments of less than 40 percent. Of those, all but one was in the Southern region. The low percentage of female enrollment in these schools, however, tends to be as a result of the drop-out of girls rather than a proportionately low enrollments in Standard 1.

C. Getting Girl's Into School At Younger Ages

The average age of Standard 1 girls in this survey was 7.9 years of age - relatively unchanged from 8.0 reported in the 1988 school year (Ministry of Education and Culture, 1988), Regional variations were evident, however. Table 5 shows variations by region of age in Standard 1 for girls.

Table 5 Age of Standard 1 Girls by Region

| | Mean Age | Standard Deviation |
|-----------------|----------|--------------------|
| Northern Region | 7.2 | .59 |
| Central Region | 8.1 | .94 |
| Southern Region | 8.1 | .84 |

It must be remembered that the age in Standard 1 reflects not just new entrants, but repeaters as well. Thus, where repeaters are predominant, average age will be high although age of initial entrance may stay relatively young. The statistics are interesting, nevertheless, because they accurately reflect the age at which girls are in Standard 1. Girls in the Northern Region are about a year younger than those in the other two regions. Equally as interesting is the standard deviation - a measure of variation. Girls in the Northern region are more homogeneous in age in Standard 1 than are girls from either the Central or Southern Regions. Thus, approximately 68 percent of Northern Standard 1 girls are within a year of the mean age, whereas only 40 percent of girls in the other two regions are within one year of their regional mean age.

IV. WHO STAYS IN SCHOOL?

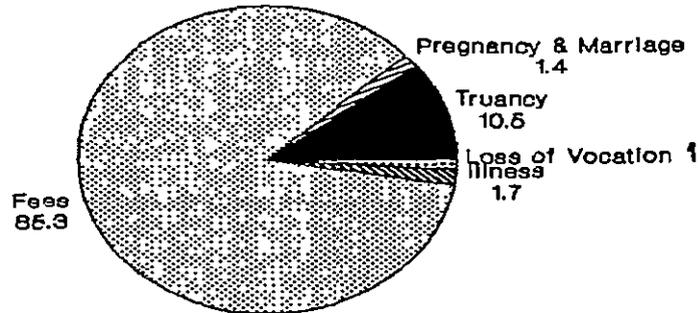
A. The Drop-out Problem

Substantial numbers of students were reported as dropping out. The school questionnaire devoted one page to detailing drop-outs by standard, sex and reason for dropping-out. It was not clear whether the drop-outs reported in that table (Table 2) were included in the enrollment table (Table 1). An assumption was made that drop-outs were first counted as enrolled and then recorded as having dropped out. The following is based on this assumption. Also, it should be noted, that the dropouts reported are only those that would have initially enrolled at the beginning of the year. Likely there are other dropouts who "dropout" between school years - that is, they fail to enroll in a subsequent year. Thus, the following data undoubtedly represents just a portion of total dropouts from the system.

A number of potential categories were available to headmasters to detail reasons for drop-outs. Some of these categories contained a negligible number of students. The pertinent categories were: truancy, pregnancy, marriage, fees, illness, and loss of vocation. Loss of vocation, it was explained to me, meant that a child had lost interest in school because little chance was perceived of continued schooling leading to employment.

Fully 21 percent of all children dropped out of school. Girls dropped out a bit more frequently with 22 percent dropping out during the eight standards (boys = 20%). Graph 1 shows the breakdown of dropouts for all standards.

**Graph 1 Breakdown of Girl Dropouts
(all Standards)**



Nearly 19 percent of all enrolled girls dropped out due to school fees - 85 percent of all dropouts. Truancy explained a further 2 percent (representing 11% of all dropouts).

Dropouts were highest at lower standards. Table 6 shows percentage dropouts at each standard.

Table 6 Girl drop-outs by standard

| Standard | # of dropouts | % dropping out | % of total dropouts |
|----------|---------------|----------------|---------------------|
| 1 | 1996 | 38% | 49% |
| 2 | 734 | 20% | 18% |
| 3 | 450 | 16% | 11% |
| 4 | 311 | 16% | 7% |
| 5 | 222 | 14% | 5% |
| 6 | 154 | 14% | 4% |
| 7 | 98 | 12% | 2% |
| 8 | 106 | 10% | 3% |

Although a substantial percentage of each standard is lost to dropouts, the main wastage is in Standard 1 where nearly forty percent of all enrollees dropout. Eliminating Standard 1 dropouts alone, would halve the number of girl dropouts in primary school. An analysis of dropouts by standard and comparisons with boys follows in the next section.

B. Analysis of drop-outs

Comparison by Standards. Total numbers of drop-outs vary by standard as discussed above. But reasons for dropping out differ by standard as well. Table 7 shows the breakdown of dropout reasons by standard.

Table 7 Reasons for dropping out by standard - Girls (in percents of total dropouts for standard)

| Reason | Std 1 | Std 2 | Std 3 | Std 4 | Std 5 | Std 6 | Std 7 | Std 8 |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Truancy | 13% | 7% | 8% | 6% | 9% | 12% | 11% | 7% |
| Pregnancy | 0% | 0% | 0% | 1% | 1% | 7% | 5% | 9% |
| Marriage | 0% | 0% | 0% | 0% | 3% | 3% | 3% | 9% |
| Fees | 85% | 90% | 87% | 88% | 85% | 75% | 67% | 68% |
| Illness | 1% | 2% | 3% | 2% | 1% | 1% | 8% | 2% |
| Loss of Vocation | 0% | 1% | 2% | 2% | 1% | 1% | 6% | 4% |

Clearly, the major reason for dropping out across all standards is because of lack of ability to pay school fees. Up to 90% of all dropouts (by standard) leave due to inability to pay fees. Inefficiencies are probably more pronounced due to this factor than even these figures show. Anecdotal evidence suggest that many parents enroll children in school at the beginning of the school year and allow them to stay until payment of fees is required (usually about half way through the school year). Children are then re-enrolled the next year. This may cause several problems:

- o Over-crowding of classrooms for the first half of the year by children who have little hope of proceeding to the next school year.
- o Children who re-learn the same material year after year as they repeat the first half of the standard each year.

- o Eroding retention of material already learned because the break between dropping out and re-enrollment is about eight to nine months.

Another interesting reasons for dropping out is "loss of vocation." Although the explanation given for this category implied that the child saw little reason to continue due to prospective employment returns, the pattern in Table 5 suggests that loss of vocation dropouts increase in later standards. Likely this is a measure of opportunity cost. A child may simply be required to "change" vocational aspirations from formal employment to household maintenance as her labor becomes more valuable for the household. It would be interesting to note whether this these types of drop-outs increase in Forms One through Four.

Finally, both pregnancy and marriage show a substantial increase as reasons for dropping out in later standards. This coincides with previous evidence that many girls drop out of school to either get married or have a baby. Once married or having been pregnant, the girls are not allowed to return to school. Table 8 shows pregnancy and marriage drop-outs by standard and age.

Table 8 Girls pregnancy and marriage dropouts by standard

| Standard | Total Girls Enrolled | Total marriage & pregnancy dropouts | Average Age |
|----------|----------------------|-------------------------------------|-------------|
| 1 | 5240 | 0 | 8.1 |
| 2 | 3626 | 2 | 10.0 |
| 3 | 2849 | 0 | 11.3 |
| 4 | 1971 | 4 | 12.4 |
| 5 | 1585 | 9 | 13.0 |
| 6 | 1103 | 15 | 13.7 |
| 7 | 822 | 7 | 14.3 |
| 8 | 1101 | 20 | 15.2 |

It is notable that fifteen girls dropped out of Standard 6 due to marriage and pregnancy when the mean age at that standard is less than the fourteen years of age. This is even more remarkable when one considers that this count would not include those who dropped out between school years.

By Standard 8, marriage and pregnancy accounts for nearly 20 percent of all female dropouts. Given the relatively low mean age at this standard (15.2), it is likely that marriage and pregnancy dropouts increase substantially in secondary school.

Comparison by Sex. Overall, the pattern of dropouts did not differ profoundly between boys and girls. Table 9 compares the differences between boy and girl dropouts. The table was derived

by comparing percentage of total dropouts by sex for each dropout reasons. Percent of boy dropouts in each category are subtract from percent of girl dropouts in the category. Thus, a positive sign (+) indicates a higher rate of girl dropouts for the category while a negative sign (-) indicates that boys were more likely to dropout in the specified category. A designation of "0%" in the category denotes little differences between boys and girls.

Table 9 Comparison of Boy and Girl Dropouts by Category (Difference between percent of total dropouts)

| Reason | Std 1 | Std 2 | Std 3 | Std 4 | Std 5 | Std 6 | Std 7 | Std 8 |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Truancy | +1% | -1% | +2% | -5% | +4% | +5% | +1% | -3% |
| Pregnancy | 0% | 0% | 0% | +1% | 0% | +7% | +5% | +9% |
| Marriage | 0% | 0% | 0% | 0% | +3% | +3% | +2% | +8% |
| Fees | -2% | 0% | 0% | +2% | -5% | -14% | -9% | -16% |
| Illness | 0% | 0% | +1% | 0% | 0% | 0% | +4% | +1% |
| Loss of Vocation | 0% | 0% | 0% | +3% | -2% | 0% | +1% | +2% |

It should be noted that Table 7 compares patterns of dropouts - not absolute numbers or percentages. Thus, while, of total dropouts, a lower relative percent of girls leave because of fees in later standards than boys, the actual attrition rate in Standard 8 (for instance) for boys and girls is approximately equal (about seven percent). What the table shows is that the pattern of reasons for dropping out changes over time. Whereas the patterns are similar

between boys and girls in Standards One through Three, patterns change thereafter.

Marriage and pregnancy reasons for leaving school are substantially greater among girls in later standards when they are compared with boys. In Standard 8, marriage and pregnancy account for 17 percent more dropout girls than boys. In fact, only ten boys in this sample left school for these reasons, while 57 girls left due to marriage and pregnancy. It is possible for a boy to leave school if he is known to have caused a pregnancy or to have gotten married - but, as my informants pointed out, it is much more difficult to prove in the boy's case than in the girl's.

Girls seem to leave school due to truancy and loss of vocation more than boys, on average. This could point to the dual reasons of little hope for formal employment prospects and a high value being placed on girl's labor in the home - especially for older girls.

C. Factors Affecting Drop-outs

As with other schooling factors, regional differences were found. Only 14 percent of girls enrolled in Northern schools dropped out of primary school while the Central region had a dropout rate of 26 percent and the Southern region had a 29 percent rate. Once again, the Northern region showed more homogeneity

between school in dropout rates - almost half the variation seen in Central and Southern regions.

Areas where women aged 20 to 35 had high levels of school exposure also had lower drop-out rates. Table 10 compares dropout rates for girls in regions with varying rates of female education.

Table 10 Dropout rates by rates of adult female levels of exposure to education

| Percent of Women in District Who Ever Attended School | Average Percent of dropouts | N |
|---|-----------------------------|----|
| 18% - 33% | 33% | 12 |
| 34% - 67% | 25% | 39 |
| 68% - 88% | 17% | 14 |

Once again, this data speaks to the notion that a "tradition" or "expectation" of schooling exists differentially in areas throughout the country. Where prospective mothers have relatively high exposure to education, their daughters are more likely to enroll and stay in school.

The percentage of female teachers in the school also has a positive and significant affect on the rate at which girls drop out of school. Table 11 shows this relationship.

Table 11 Girl drop out rates by percent of female teachers in the school.

| Percent of female teachers in the school | Average percent of dropouts | N |
|--|-----------------------------|----|
| 0% - 14% | 33% | 22 |
| 15% - 31% | 25% | 21 |
| 32% - 62% | 17% | 21 |

Schools are predominantly staffed by male teachers. Five schools had no female teachers and no schools had more than 62% female teachers. Nationwide, this sample showed that 24 percent of all teachers are female. Table 12 shows the numbers of schools in the sample categorized by percentage of female teachers employed.

Table 12 Percentage of Female Teachers in Sample Schools

| Percent of female teachers employed | Percent of Schools | N |
|-------------------------------------|--------------------|----|
| 0% - 9% | 14% | 9 |
| 10% - 19% | 36% | 24 |
| 20% - 29% | 15% | 6 |
| 30% - 39% | 18% | 12 |
| 40% - 49% | 8% | 5 |
| 50% - 59% | 8% | 5 |
| 60%+ | 1% | 1 |

A final factor affecting girls dropout seems to be age of initial enrollment. Table 13 shows this relationship.

Table 13 · Average age in Standard 1 by dropout rate

| Dropout Rate | Average Age in Std. 1 |
|--------------|--------------------------|
| 0% - 13% | 7.7 |
| 14% - 30% | 8.3 |
| 31%+ | 8.3 |

Schools which fell in the bottom third group for dropout rates had girls who entered school an average of half a year younger than schools with higher dropout rates. Getting girls in school earlier - even a year earlier seems to improve their chances of staying in school.

V. WHO DOES WELL IN SCHOOL?

A. Reducing Repetitions

Repeating girls made up fully 20 percent of all female enrollees in primary school. Repetitions were highest in early standards with the exception of Standard 8 where a higher percentage of girls repeated the standard. Table 14 shows repetition rates by standard and in comparison with boys.

Table 14 Repetitions rates by standard and sex

| Standard | Boys' Repetition Rates | Girls' Repetition Rates |
|----------|------------------------|-------------------------|
| 1 | 28% | 23% |
| 2 | 19% | 21% |
| 3 | 15% | 17% |
| 4 | 16% | 16% |
| 5 | 14% | 14% |
| 6 | 14% | 18% |
| 7 | 17% | 18% |
| 8 | 46% | 44% |

Repetition rates are high in Standards 1 and 2. This is possibly related to the issue of school fees. As discussed earlier, parents may possibly send children to school until fees are due. Those children who have been withdrawn are re-entered in school the next year and counted as repeaters. A child who fits this pattern will likely not advance much beyond the first standard or two of school - hence a marginal drop-off of repeaters are Standards 1 and 2.

Patterns for boy and girl repeaters are fairly similar with boys repeating Standard 1 more often than girls. (Possibly a measure of perseverance than failure). Girls repeat Standard 8 slightly less than boys - reflecting, possibly a minor propensity to withdraw from the competition to enter Secondary school and contribute time and energy to household duties.

The only other factor which appears to influence girls repetition rates is the percentage of female teachers in the school. Table 15 shows this relationship.

Table 15 Girls Repetition Rates by Percentage of Female Teachers in School

| Percent of Female Teachers in the School | Girls' Repetition Rate |
|--|------------------------|
| 0% - 14% | 22% |
| 15% - 30% | 21% |
| 31% - 62% | 17% |

Once again, the percentage of female teachers in the school tends to have a positive affect on girls' educational achievement. In this case, having an equal or majority of female teachers reduced repetition rates by approximately four percent.

B. Increasing Test Scores

In order to pass the Secondary Entrance Exam (SEE), one must get a chance to take it. The data indicates that there is a higher percentage of Standard Eight enrolles that actually take the exam than are enrolled in Standard Eight. Percents of those,who passed the exam were reported by school and sex, however, and give an fairly accurate picture of the types of schools which foster higher pass rates.

No regional differences were evident in pass rates. Of course, in the weaker schooling areas of the Central and Southern Region, fewer children attend school and higher percentages of both repeaters and drop-outs are reported. Thus, the group that actually takes the exam may be more select - thus offering competition to schools in the North which generally show higher quality and attendance characteristics.

Mothers' education once again had an impact on the percent of girls who passed the exam. In areas where adult females generally have high exposure to education, girls scored higher on the exam. Table 16 shows this relationship.

Table 16 SEE Pass rates by adult female levels of exposure to education

| Percent of Women in District Who Ever Attended School | Average Percent of girls passing the SEE | N |
|---|--|----|
| 18% - 33% | 49% | 12 |
| 34% - 67% | 51% | 39 |
| 68% - 88% | 64% | 14 |

Areas where at least two thirds of adults women aged 20 to 35 had attended school showed an average pass rate 14 percent higher, on average, than in areas where adult women had less education. Clearly, educating future mothers affects future generation's success in school.

The other major factor affecting girls' pass rates was the number of years of experience the of the average teacher. Table 17 shows the relationship between average years of teacher experience and pass rates of girls.

Table 17 Girls' SEE Pass Rates by Average Years of Teacher Experience in the School

| Average Years of Teacher Experience | Mean Pass Rate |
|-------------------------------------|----------------|
| 2.6 - 6.8 years | 45 |
| 6.9 - 10 years | 51 |
| 11 - 19 years | 63 |

Roughly a rise of one year in average teaching experience of the staff at a school equates to a one percent rise in pass rates for girls in the SEE exam. This will represent another development "hump" as more younger teachers enter the system, it will take time before average years of experience begin to rise in existing and new schools.

The percentage of female teachers in the school also had an affect on pass rates - although not as profound an effect as adult women's education. In schools where at least a third of the teachers were female, girls passed at a four percent higher rate than in schools which employed less than a third female teachers.

Classrooms per student affected pass rates marginally. When more than 70 children (on average throughout the school) were crowded into a classroom, pass rates for girls fell by two percent.

Another two percent was lost when classroom size grew beyond 87 students per classroom.

VI. CONCLUSIONS

This report attempts to describe, and, in some cases, discern patterns concerning enrollment, repetition rates, dropout rates and pass rates on the SEE for girls in Malawi's primary schools. No attempt has been made to model these factors with inferential statistics. Thus, the conclusions are restricted to pointing out general trends and patterns.

A. Long-term Investment in Girls' Education

The data reinforced what researchers in other countries have found - that investing in female education means investments in generations to come. One of the strong relationships was found in the strength of mother's education (in this case, educational exposure of adult women in the district) and girls' school success. Mothers' education was found to be related to the percent of girls in the region who enroll in school, the proportion of girls to boys in the school, lower dropout rates, and age of initial enrollment in school. Educating Malawi's girls means educating them and their daughters (and, most likely, sons).

If these girls become teachers, they will have a substantial affect on the education of more girls. Having a large percentage

of female teachers in the school reduced both repetitions and dropouts of girls.

B. Regional Disparities

Clearly, educational opportunities and success are not evenly distributed in the country. The Northern region provided girls with more access, more sustainability and more success in school. Educational policies ought to target these two areas for both further research and special consideration of educational projects.

Regional analysis also pointed to the trend that the Central and Southern regions were less homogeneous in school factors - that is, the schools in these areas varied widely in access and quality measures. Obviously, some intervening factors are at work in these areas that cause wide variation in school qualities and access.

C. Reducing Dropouts

A major problem revealed by the data, was that of dropouts. Dropouts drastically reduce the number of enrollees in the system. Not only are the benefits of education to the individual reduced when dropouts occur early in primary school, the high percentage of dropouts means that already overcrowded classrooms are needlessly overburdened when children who will not complete the standard enroll for the initial four months. Reducing dropouts ought to be a major policy initiative.

The primary reasons for dropouts is school fees. Although small, it is quite apparent, that current school fees are too much for many parents to pay. GABLE's proposal to pay some of these fees should help.

Even though the girls in the sample averaged a fairly young age, a rather large percentage dropped out due to pregnancy and marriage once they reached the upper standards. This is a concern. First, probably the numbers undoubtedly represent an undercount of this factor as many girls who were pregnant or wanted to get married would do so between school years and would not be counted in this survey. The survey only counted students who dropped out within the span of the school year itself.

Forcing students to leave school when pregnancy or marriage occurs is a particular stigma to girls. Very few boys were forced to leave school because they caused a pregnancy or got married. The MOEC may want to reconsider its policy on pregnancy and marriage. A more lenient policy, or a policy of reinstating these girls would put a substantial number of girls back in school. In particular, the girls that drop out for these reasons have already survived into the upper standards and are likely strong and valuable students.

VII. SUGGESTIONS FOR FURTHER RESEARCH

The data set has revealed several trends. It is a rich data set and the exploration of the answers it holds has just begun. Many hundreds more relationships and patterns could be explored. Any further research ought to begin with looking to this data set to see what can be gleaned from it.

The following is a list of some of the more obvious research questions which came to mind while I wrote this report.

1. Why is the Northern Region so strong in education? Anecdotal evidence suggests that part of the explanation may be historical as the Northern Region had a strong missionary presence. How can the other two regions be brought up to the educational attainment of the North?
2. Who takes the SEE? Number of students who took the exam often exceed the number of reported enrollees. Are Standard 7 students allowed to "practice" on the exam? Are former dropouts allowed to come back to take the exam?
3. What monetary and non-monetary costs are associated with schooling girls? Since the payment of a relatively small school fee seemed to be a major deterrent in continuation of

school, it would be important to detail any other monetary costs in some detail and with some care. Most obvious would be costs associated with school uniforms. Other costs may surface.

4. Who passes the SEE? Do Standard 8 girls take the exam at the same rate as boys? How much do their pass rates differ? What sub-tests do girls do relatively well on and which are they at a particular disadvantage?

Appendix I
List of School Included in Survey

| NORTHERN REGION | School # | CENTRAL REGION | School # |
|-----------------|----------|----------------|----------|
| Chitipa | | Dedza | |
| Ipulukutu | 42 | Chimphalika | 30 |
| Mutogha | 40 | Kanjedza | 29 |
| Nachinganda | 41 | Mbazi | 28 |
| Karonga | | Dowa | |
| Hara | 31 | Aiwalandiwo | 25 |
| Kaundi | 32 | Chimungu | 26 |
| St. Marys | 33 | Longwani | 27 |
| Mzimba | | Kasungu | |
| Chikangawe | 7 | Dwangwa | 46 |
| Elangeni | 8 | Kauizinde | 47 |
| Kamteteka | 9 | Nkhwkama | 48 |
| Nkhata Bay | | Mchinji | |
| Kawiya | 65 | Choumba | 17 |
| Rumphi | | Kamuzu | 16 |
| Luviri | 57 | Kazuozyo | 18 |
| Luwuchi | 55 | Nkhotakota | |
| Rumphi | 56 | Kasangadzi | 49 |
| | | Linga | 50 |
| | | Mapala | 51 |
| | | Ntcheu | |
| | | Gunde | 45 |
| | | Nthumbi | 44 |
| | | Zakazaka | 43 |
| | | Ntchisi | |
| | | Chorwe | 2 |
| | | Kanyulunyulu | 1 |
| | | Mphere | 3 |
| | | Salima | |
| | | Chitala | 66 |
| | | Lifuwu | 64 |
| | | Namamda | 63 |

SOUTHERN REGION

School #

Blantyre Rural

| | |
|----------|----|
| Linjidzi | 54 |
| Mpapa | 67 |
| Namwanje | 53 |

Thyolo

| | |
|---------|----|
| Bvumbwe | 35 |
| Kapichi | 34 |
| Maonga | 36 |

Chikwana

| | |
|---------------|----|
| Chitungwani | 13 |
| Konzere | 14 |
| Mthumba Model | 15 |

Zomba

| | |
|----------|----|
| Chikomwe | 24 |
| Lifani | 22 |
| Mpachika | 23 |

Chiradzulu

| | |
|-----------|----|
| Lisawo | 60 |
| Muluma | 59 |
| Nankhundi | 58 |

Machinga

| | |
|----------|----|
| Chembera | 19 |
| Mangombo | 20 |
| Utale I | 21 |

Mangochi

| | |
|-------------|---|
| Koche Model | 6 |
| Manganjira | 4 |
| Mpale | 5 |

Mulanje

| | |
|----------|----|
| Chinyama | 11 |
| Manyamba | 12 |
| Muloza | 10 |

Mwanza

| | |
|-----------|----|
| Kasenjere | 62 |
| Mlemeka | 69 |
| Nsaweaza | 68 |

Nsanje

| | |
|------------|----|
| Dinde | 38 |
| Kalupsa | 37 |
| Sankhulani | 39 |