HEART
HEALTH & EDUCATION ADVICE & RESOURCE TEAM

Helpdesk: **Evidence on girls' secondary education**

Date: **18th December 2015**

QUERY:

Undertake a rapid review of the evidence around girls and secondary education in developing contexts and summarise the key issues arising from this evidence. Include an annotated bibliography. Please include recent evidence, preferably later than 2005.

Initial issues to cover:

1. What are the key barriers affecting girls' transition to secondary, attendance, completion and achievement?
   - What environments are considered high risk for low enrolment, retention and achievement of girls in secondary education?
   - What are the implications of girls being overage, when they attend secondary school?
2. What are the implications of non-compulsory secondary education for girls?
3. What are the implications of costs associated with secondary education for girls, especially where it is not free?
4. What is the impact of different delivery models on girls' enrolment, retention, completion and achievement?
   - What innovative models have shown to be effective in addressing barriers for girls' in secondary education?
   - What are the implications for the most marginalised girls? (Include those with disabilities, those living in FCAS, extreme poor).

Request for further analysis:

Which models have benefitted the most marginalised adolescent girls and enabled them to transition through the education system? In particular those girls that fall into the extreme poverty category and those facing multiple disadvantages – including disability or living in conflict/remote locations? Include relevant evidence from South America. Consider transition in the broad sense, including transitions form non-formal to formal education.

Contents

1. Overview of Key Findings

- The cost of secondary education, including fees, other direct costs and opportunity costs constitute the primary barrier to secondary education in most contexts. The costs are often higher for girls than boys. Strategies that address the cost barriers, such as fee elimination and cash transfers are generally effective at increasing girls' participation in secondary education. The most direct and fastest way for governments to boost girls' enrolment is to ban schools from collecting fees.

- Distance to school is another significant barrier to secondary education for many girls. Interventions that provide additional girls' school places in underserved areas are generally successful.

- Gender based violence in and around school, child marriage and early pregnancy are all significant barriers to secondary education for girls. Gender inequalities in expectations, roles, allocation of chores and learning experience also act as barriers to girls' participation in secondary education in many contexts.

- Over-age school attendance is very prevalent in low income countries. Girls who are over age are more likely to drop out and less likely to progress to secondary school.

- There are at least 20 countries where girls, on average, receive less than 9 years education. In almost all of these countries, girls receive fewer years of education than boys.

- In many countries where DFID works, education is not compulsory beyond 13 years of age. But in many countries where compulsory education extends beyond this age, girls' secondary enrolment rates are very low.

- There is inconsistent evidence as to whether private schools are equally accessed by boys and girls. There is stronger evidence that philanthropic and religious schools allow equal access to boys and girls. Public Private Partnerships, where the state

funds places in private schools, appear to be beneficial to girls in contexts where there is a good supply of quality private secondary school places for girls.
- There is extensive evidence that disadvantage is compounded by being a girl. Whilst the gender gaps in enrolment at the global and, in most cases, at the national level are small, gender gaps to the detriment of girls tend to be wider within the most marginalised populations. However, few programmes target combinations of gender with other forms of social exclusion.
- Social safety net programmes have been found to be effective at helping poor rural girls to access secondary education but there is evidence that the poorest of the poor sometimes miss out on receiving the benefits they are entitled to.
- Non-formal accelerated learning programmes can help girls who have missed out on education to catch up on their basic education. But very little research or evaluation of the transition of girls from such programmes into other forms of education has been published.

2. Background

Transition rates between primary and secondary school vary from 51% to 95% in sub-Saharan Africa. Girls in particular are lost in the transition period, owing to gendered obligations to do more domestic work, and fewer economic opportunities for young women.

There are a number of barriers to entry, attendance and completion as a result of gender, rural/urban location and socio-economic status. In most countries, upper secondary education is not compulsory, reducing equity of access at this level. Students from poorer backgrounds are less able to continue paying for costs of secondary education. Urban children are much more likely to attend secondary school, than their rural peers.

In many countries, students in secondary school are over-age, and are unlikely to complete, putting them at greater risk of repeating or dropping out. Globally, girls' gross enrolment in secondary education increased from 69% in 1999 to 79% in 2009. But gender disparity persists across all regions. The largest gender disparities in enrolment and attainment are in sub-Saharan Africa and South Asia, where higher levels of education correlate with increasing gender disparity. Girls face barriers to access, while boys encounter barriers within the school system (e.g. repetition). Drop-out rates among girls during adolescence, especially in poorer households, can occur because young men are favoured to receive education; girls may enter into early marriage, or become pregnant.

3. Sources used for this review

There have been a number of recent extensive reviews of the literature on girls' education, most notably:
- Sperling and Winthrop (2015) *What Works in Girls' Education: Evidence for the World's Best Investment.*
- Unterhalter et al. (2013) *Interventions to Enhance Girls' Education and Gender Equality. Education rigorous literature review.*

This paper draws extensively on these reviews and summaries of these two publications are given in the annotated bibliography in section 13 of this report.

Other reviews of evidence on girls' education referred to in this paper include:
- King and Winthrop (2015) *Today's Challenges for Girls' Education*
- Global Partnership for Education (GPE) (2013) *Accelerating Transition of Girls to Secondary Education.*

- UNESCO (2015) *Gender and EFA 2000-2015*
- Lloyd and Young (2009). *New Lessons: the Power of Educating Adolescent Girls*

In order to research specific questions, we have also drawn evidence from a number of recent rigorous and systematic reviews on other topics, including the following:

- Banerjee et. al. (2013). *Expanding Access and Increasing Student Learning in Post-Primary Education in Developing Countries: A Review of the Evidence.*
- Burde et al. (2015). *What Works to Promote Children's Educational Access, Quality of Learning, and Wellbeing in Crisis-Affected Contexts. Education Rigorous Literature Review*
- Day et al. (2014). *The role and impact of private schools in developing countries: a rigorous review of the evidence*
- Morgan et. al. (2012). *A systematic review of the evidence of the impact of eliminating school user fees in low-income developing countries*
- Wales et al. (2015) *The role and impact of philanthropic and religious schools in developing countries: A rigorous review of the evidence.*

Given the number of recent quality rigorous review publications covering aspects of girls' secondary education, there was limited added value in conducting extensive searches of primary research in the academic databases, as most relevant papers had already been identified and reviewed by the above. A number of searches were conducted of the most recent literature in the academic databases (2014 and 2015). For some specific questions, where only limited evidence could be found, this date range was extended. Some primary sources identified in the reviews listed above were studied in more detail and are included. This report also draws on UNESCO's *Education for All Global Monitoring Reports*, the World Bank's *World Development Report 2012: Gender Equality and Development*, other agency reports and statistics from UNESCO's Institute for Statistics (UIS).

4. Key barriers affecting girls' transition to secondary, attendance, completion and achievement

A number of publications list the main barriers to girls' education. These are summarised in Table 1.

Table 1: Key barriers to girls' education given listed in reviews

Source	List of key barriers
King and Winthrop 2015 *Today's Challenges for Girls' Education*	Cost- higher for girls and a bigger barrier Gender roles: Restricted space and expectations Early pregnancy and marriage Violence in and around school
Coffey International Development (2015a) *Girls' Education Challenge Step change window baseline*	Low household income Low aspiration of caregivers Dangerous journeys to school Community attitudes Household chores Personal situation e.g. chronic illness, disability, caring responsibilities, ethnic discrimination
UNESCO (2015a) *Gender and EFA 2000-2015*	Early marriage and pregnancy Child labour School related gender based violence (NB cost and distance barriers are treated separately in

	section on inequality)
Global Partnership for Education (2013) *Accelerating Transition of girls to secondary education*	Marriage and early childbearing Distance to school Costs of schooling (direct and indirect) Poor home and school environment for menstrual hygiene management Barriers in labour market participation
Plan International (2012) *State of the Worlds' Girls: Learning for Life*	Cost School related gender based violence Early pregnancy Household chores Lack of food

In contexts where gender-segregated schooling is the norm, for example in Pakistan, additional barriers include the limited supply of girls' schools (Irfan, 2010) and of educated women to become teachers (Andrabi et al., 2011).

Three extensive reviews present evidence on the strategies that have been shown to be effective in promoting girls' education. The extent to which a perceived barrier to education is an actual barrier, and a binding constraint, can be partly inferred from the effectiveness of strategies targeting those barriers. Effective strategies presented in the reviews are provided in Table 2.

Table 2: Effective strategies for promoting girls' education given in major reviews

Source	Effective strategies shown to increase girls' participation in education and learning	Barriers addressed

Sperling and Winthrop (2015) *What works in girls' education*	• Making schools affordable
	• Health, sanitation and nutrition interventions
	• Reducing journey time to school
	• Girl friendly schools
	   ○ provision for young mothers
	   ○ safer schools
	
	• Better teachers and teaching
	• Increased community engagement
		• Cost
		• Health, sanitation and nutrition barriers
		• Distance to school
		• Schools not girl friendly:
		   ○ exclusion of young mothers
		   ○ school related gender based violence
		• Low teaching quality
		• Lack of community engagement

Unterhalter et al. (2013). *Interventions to Enhance Girls' Education and Gender Equality. Education rigorous literature review*	• Conditional Cash transfers • Information about returns to education • Additional schools in underserved areas • Teacher training in content, pedagogy and gender equality • Girl friendly schools • Group learning • Learning outside the classroom	• Cost • Underestimates of value of girls' education by parents • Distance • Poor teacher knowledge • Schools not girl friendly • Inappropriate pedagogy • Lack of learning time
Lloyd and Young (2009). *New Lessons: the Power of*	• Scholarships and stipends • Recruitment of female educators	• Cost • Lack of female teachers

Educating Adolescent Girls		

Many of these barriers apply to both boys and girls, but they are often worse for girls, for example, households that are a long distance away from the nearest school are often more willing to allow a boy to travel the distance unaccompanied than to allow a girl to do the same (GPE, 2013). The responsibilities for household chores and caring for young and ill members of a family are often seen to fall more on girls than on boys (GPE, 2013). School fees impact more on girls' enrolment than boys (King and Winthrop, 2015).

The largest gender gaps to the detriment of girls are often found among the poorest populations living in the most remote and underdeveloped areas (Lewis and Lockheed, 2008). However, in many situations there is little difference in girls' and boys' participation rates in schooling, at least for younger adolescents. In the Girls' Education Challenge (GEC) baseline, the enrolment rates for 14-15 year old girls was similar to that of boys, with no significant difference in around half of the project areas. In project areas in Afghanistan, Somalia and refugee camps in Kenya, there was a significant gap in favour of boys. In Camfed's project areas in Zimbabwe and Tanzania there was a significant gap in favour of girls (Coffey International Development, 2015).

Cost

Barriers related to the economic costs of schooling have consistently been shown by research to be the most significant barrier to girls' and boys' education, and strategies that address the costs of schooling are the ones with the most consistent evidence base for positive impact on girls' access to school. Economic inequalities are generally far more significant than gender inequalities, with the differences in education access and attainment between the richest and poorest considerably wider than the gaps between girls and boys (Porta et al., 2011). The implications of school-related costs are explored in more detail in Section 8.

Distance

After economic inequality, location is the next major source of inequality in access to education. Distance to school has a clear impact on girls' participation rates in secondary education. In some contexts (e.g. Nigeria, Uganda, Zambia) the negative impact of increased distance to school on attendance is similar for boys and girls. In other contexts (e.g. Malawi, Ghana, Afghanistan and Pakistan) girls' participation rates are more sensitive to distance than boys'. This may be because parents are less willing to allow girls to travel unaccompanied compared to boys. Distance to school accounts for the bulk of the gender differential in secondary enrolment in Pakistan (GPE, 2013).

Early marriage and childbearing

Child marriage can be seen as a way of protecting daughters' reputations, with child betrothal being common in South Asia, and interrupting education at upper primary and lower secondary levels (UNESCO UIS, 2015). In many cases it appears that child marriage is a consequence of school dropout (Lloyd and Young, 2009). However, it can also be a cause (GPE, 2013; King and Winthrop, 2015).

Pregnancy is a major cause of dropout for females in secondary school in many sub-Saharan African (SSA) countries. In Central African Republic, Mozambique and South Africa, it is the leading cause of dropout, and in 23 countries in SSA, pregnancy accounts for at least 18% of female dropouts from secondary school (GPE, 2013). It should be noted that girls in secondary school are often over-aged (see Section 5) so secondary school students who become pregnant may be over the national age of consent.

Many education systems lack flexible schooling arrangement for young mothers. Only 49 out of 155 countries with available data have clear policies in place to enable young mothers and pregnant girls to continue with their education and return to school. Even where policies are in place, they are not always effective. Young mothers are often rejected by their teachers, principals and other pupils, and the social assumption is that education finishes once a girl has given birth (UNESCO UIS, 2015; Birungi et al., 2015).

Low expectations for girls

Parents often have low expectations of the potential returns from educating their daughters. But when opportunities become more apparent, girls' enrolment can increase. In Bangladesh, when women's employment opportunities suddenly increased with the growth of the garment industry, girls' enrolment increased so that they could capitalise on the new opportunities (World Bank, 2012, cited in Sperling and Winthrop, 2015).

Gendered beliefs by communities, students and teachers can have a negative impact on their learning and persistence in school. Teachers often hold low expectations towards girls' academic performances (GPE, 2013). This can reduce girls' motivation and discourage them from continuing further education (UNESCO, 2015a).

Household chores

High levels of child labour, both paid and unpaid, can have a negative effect on the enrolment and attendance of boys and girls. When household work is taken into account, girls' work burden may be heavier than boys'. The absence of basic electricity and water supply can impose a heavy time burden on girls (King and Winthrop 2015). A study in Ghana found that time taken by girls fetching water had a detrimental impact on their school attendance (Naules and Strand, 2011, cited in GPE, 2013).

Girls' underachievement in poorer settings

In contexts where secondary school is not compulsory and where entrance to most secondary schools is selective, high stakes examinations can form a further barrier to access. In some African countries, girls perform significantly worse than boys in national examinations.

Girls tend to do as well or better than boys in many international and national learning assessments, but in poorer settings, such as in Balochistan and the Federally Administered Tribal areas of Pakistan, adolescent girls' learning outcomes fall behind those of boys (UNESCO, 2015a). Analysis of the mathematics results for 10 and 11 year olds in India and Pakistan, as measured by the ASER surveys in 2012, show that whilst richer girls outperformed richer boys in some states/ provinces, poorer girls consistently underperformed compared to poorer boys (UNESCO, 2014).

A study into girls' learning (Postles, 2008) found that in Kenya, Malawi, Tanzania and Sierra Leone girls underperformed compared to boys in primary school leaving examinations. It also found gender differences to the disadvantage of girls at national secondary school examinations in Kenya, Zimbabwe, Ethiopia and Sierra Leone, with the gender gap in performance in Sierra Leone widening between primary and secondary school examinations. The study only covered a few countries as there was very little research or publically available data on gender differences in national examination results. Other studies finding a gender gap in primary school leaving examination performance, to the detriment of girls, include two in Kenya (Ohba, 2009, and 2013) and another in Uganda (Wells, 2009).

National examinations at the end of a school cycle are high stakes. Failure to pass or perform well can limit access to the next cycle of education. In Kenya, Malawi, Tanzania and

elsewhere, performance in exams for primary school leaving certificates determines entry into state-funded secondary schools. Those not performing well enough may be able to access private secondary education but cost limits access for poorer girls.

5. Implications of girls being over-age when they attend secondary school

Over-age attendance of primary school is very prevalent in low income countries. Based on Demographic and Health Survey (DHS) data from 1999 to 2006, Lloyd and Young (2009) found that in some of the poorest countries, over half of girls aged 10 to 14 were two years or more behind in grade for age. There was little difference between boys and girls. In Haiti, Ethiopia, Kenya, Malawi, Mozambique, Rwanda, Tanzania and Uganda, girls aged 15-19 were more likely to be enrolled in primary school than in secondary school.

The baseline study for the Girls Education Challenge step change window (Coffey International Development, 2015) found that, although most girls in project areas were enrolled in school, less than half of secondary school age girls were enrolled in secondary school. Girls were on average two years behind their expected grade level. Girls enrolled in secondary school tended to be closer to the expected age, suggesting that girls who left primary school over-aged were less likely to join secondary school.

Evidence on the implications of over-age enrolment in low income countries is limited. Searches of academic data bases produced only one study relevant to this question, which looked at gendered enrolment patterns in secondary school in Uganda (Wells, 2009). According to this paper, over-age students may be likely to drop out of school and/or less likely to advance to postsecondary education. The study found that secondary school girls in Uganda were significantly more likely to be over-aged than boys, and notes that girls were more likely to drop out. An earlier study in Ethiopia (Rose and Al-Samarrai, 2001) found that age-inappropriateness had a negative effect on school completion for girls, but not for boys.

6. High risk environments for low enrolment, retention and achievement of girls in secondary education

Comparing international statistics on secondary education is difficult because a) UNESCO lacks data for more countries on secondary than it does on primary education and b) there is considerable variation among countries in the ages and definitions of secondary education. UNESCO data use the International Standard Classification of Education (ISCED) definitions for schooling levels. In some cases these differ from national definitions. So for Kenya, for example, UNESCO statistics on lower secondary school actually refer to the last two years of Kenyan primary school.

Based on 2011 UNESCO statistics[1], 20 countries with data had Gross Enrolment Rates (GER) at lower secondary for girls of below 50% (see Table 3). Almost all of the countries are in Africa, with the exceptions of Pakistan, Yemen and Afghanistan. The global mean was 83%.

Table 3: Countries with girls' lower secondary GER below 50%

---

[1] 2011 was the most recent year with available data for most lower income countries from UIS at the time of downloading

Country	GER lower secondary, female (%)	Gender Parity Index.
South Sudan	12	0.55
Niger	17	0.67
Central African Republic	17	0.53
Chad	17	0.48
Mauritania	26	0.88
Burkina Faso	30	0.83
Burundi	30	0.75
Angola	32	0.70
Mozambique	33	0.87
Guinea	35	0.64
Rwanda	39	1.09
Malawi	40	0.94
Pakistan	41	0.81
Yemen	44	0.65
Liberia	45	0.83
Djibouti	45	0.82
Afghanistan	45	0.56
Sudan	46	0.88
Benin	47	0.68
Madagascar	48	0.96

Source: UNESCO Institute for Statistics, downloaded from http://www.uis.unesco.org
3/11/2015

Countries missing data for this statistic, but also likely to have low GER for girls' secondary school include: Cote d'Ivoire, Equatorial Guinea, Eritrea, Ethiopia, Nigeria, United Republic of Tanzania.

In most of these countries, the Gender Parity Index (GPI) was below 0.9, meaning that there were fewer than 9 girls in secondary school for every 10 boys. This strongly suggests that gender discrimination played a significant part in limiting girls' access to secondary school in these countries. The gender inequality is particularly acute in South Sudan, Central African Republic, Chad and Afghanistan. However, in Malawi and Madagascar there were similar numbers of girls and boys in lower secondary school. And in Rwanda girls' enrolment rate was higher than for boys. In these countries, gender appears to play less of a role in limiting girls' access to secondary education.

A more comparable statistic is the school life expectancy, the mean number of years a child can expect to spend within the formal school system (primary to upper secondary). There are 18 countries with data where the school life expectancy for girls is below 9 years (see Table 4). Again, the list is dominated by countries in Africa. The global mean was 10.2 years.

Countries missing data for this statistic, but also likely to have low school life expectancy for girls' include: Cote d'Ivoire, Equatorial Guinea, Eritrea, Ethiopia, Nigeria and South Sudan. It should also be noted that these data predate the recent conflicts in Syria and Iraq.

Table 4: Countries with girls' school life expectancy below 9 years.

Country	School life expectancy, primary and secondary, female (years) 2012 / 2011	Gender Parity Index
Niger	4.7	0.80
Central African Republic	5.8	0.69
Sudan	5.9	0.88
Chad	5.9	0.69
Djibouti	6.0	0.84
Pakistan	6.5	0.82
Burkina Faso	6.8	0.91
Guinea	7.0	0.77
Mali	7.2	0.82
Afghanistan	7.5	0.66
Yemen	7.5	0.77
Senegal	7.8	1.00
Mauritania	7.9	1.00
Democratic Republic of the Congo	8.1	0.79
Angola	8.4	0.64
Mozambique	8.6	0.89
United Republic of Tanzania	8.6	0.99

Source: UNESCO Institute for Statistics, downloaded from http://www.uis.unesco.org 3/11/2015

Based on the GPIs, gender discrimination plays a significant role in reducing girls' access to education in most of these countries, with the notable exceptions of Mauritania, Senegal and Tanzania.

King and Winthrop (2015) identify eighty countries where enrolment rates at primary and/or secondary are below the global average for girls and boys. The countries listed as being the most significantly below global rates are:

> Afghanistan, Angola, Benin, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Cote d'Ivoire, Democratic Republic of Congo (some data missing), Djibouti, Ethiopia, Guinea, Guinea-Bissau, Haiti (some data missing), Iraq, Laos, Jamaica, Liberia, Malawi, Mali, Niger, Nigeria, Pakistan, Sierra Leone, Solomon Islands, South Sudan, Syria, Togo, Uganda, and Yemen.

In a blog on the "The Top 10 List You Don't Want to Be On: Dangerous Places for Girls' Education", Winthrop and McGivney (2014) identified ten countries where girls are especially struggling to get an education. Based on data on gender gaps at secondary school, attacks on girls' education and rates of child marriage, they identify Chad, Somalia, Central African Republic, Afghanistan, DRC, Niger, Pakistan, Iraq, Nigeria and India as the most dangerous places for girls' education.

The World Inequality Database on Education (WIDE)[2] can be used to explore inequalities and identify high risk environments within countries. In Nigeria for example, girls of lower secondary age are 5% more likely to be out of school than boys (30% of girls compared to 25% of boys are out of school), but in rural areas the gap grows to 11% (44% for girls, 35% for boys). In the South East, adolescent boys are more likely to be out of school than girls (4% of girls compared to 6% of boys). But in the North East, girls are 10% more likely to be out of school than boys (54% of girls, 44% of boys).

In Kenya, adolescent girls are as likely to be in school as boys (4% of adolescents are out of school)[3], but in the North Eastern province, 28% of girls are out of school compared to 20% of boys. In Nairobi, young women (aged 20-24) have on average 10.7 years of education, compared to young men who have 12.0 years. But in the North Eastern province, young women, on average, have only 2.4 years of education, whereas young men have over twice that figure (5.6 years) (See Figure 1).

**Figure 1: Mean years of education of 20-24 year olds in Kenya by province, sex and wealth**
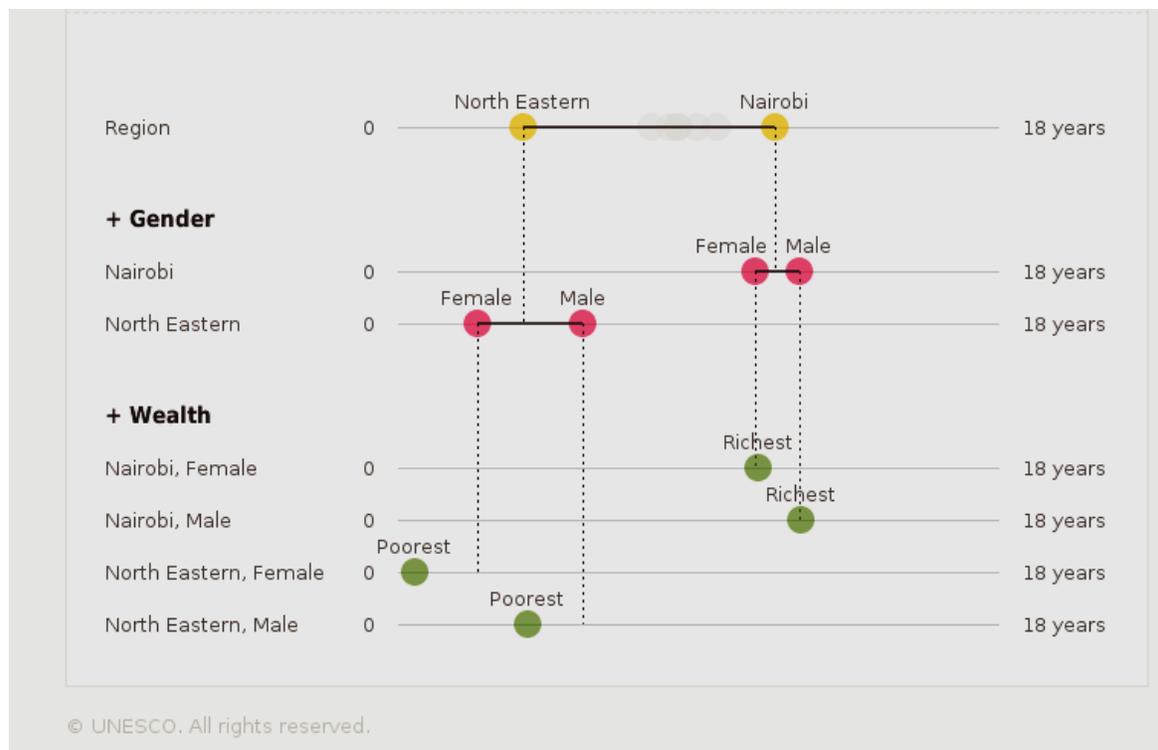
Source: http://www.education-inequalities.org/ downloaded 18/12/2015

Similarly, in India there are large regional inequalities, with the largest gender gaps in the lowest performing states. In Bihar young women have only 3.8 years of education on average, whereas men have almost twice that amount (7.6 years). By contrast, in Kerala young women have 11 years of education, more than men (10.6 years) (see Figure 2).

---

[2] http://www.education-inequalities.org/
[3] Note that statistics for "adolescent girls" in Kenya refers to girls of lower secondary school age which UNESCO defines as 12-13 year olds, corresponding to the last two years of Kenyan primary school. Disaggregated data for Kenyan secondary school (defined as upper secondary by UNESCO) are not available on WIDE.

Figure 2: Mean years of education of 20-24 year olds in India by state, sex and wealth
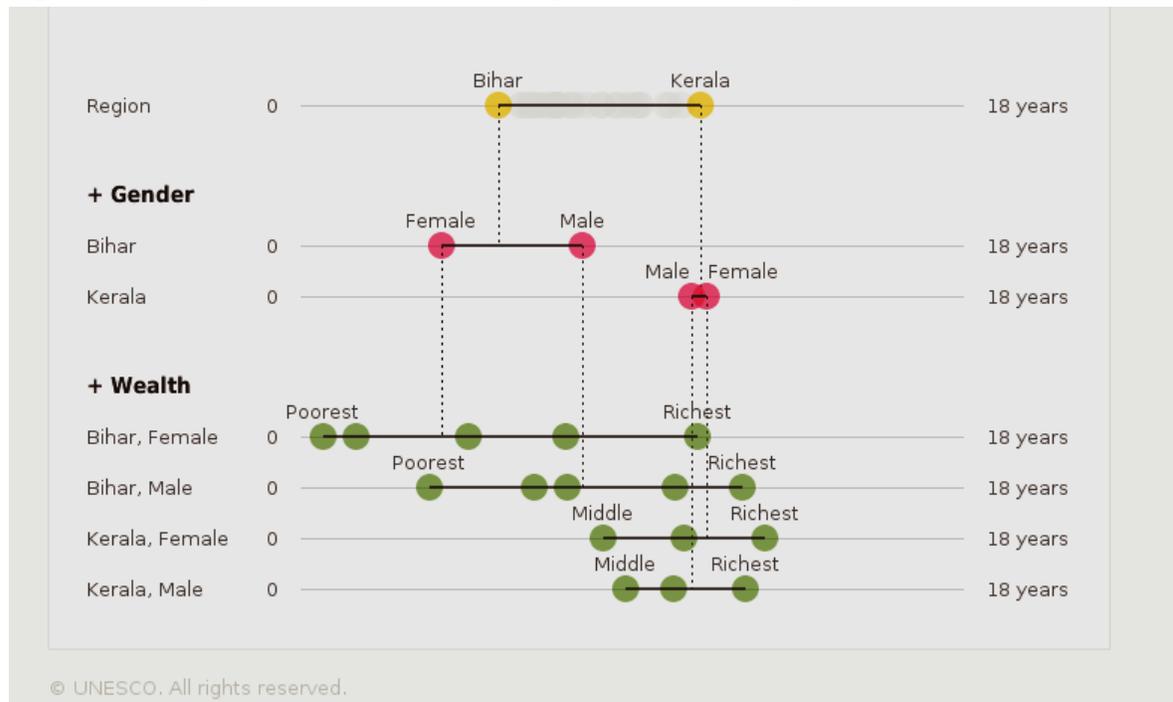
Source: http://www.education-inequalities.org/ downloaded 18/12/2015

Finding comparable data on learning achievement at secondary level is even more problematic than enrolment data. Whilst some international learning assessments cover secondary school grades, the countries lagging furthest behind in girls' education do not participate in such assessments. Findings from a survey of 27,000 marginalised girls across 12 countries conducted as part of the baseline for the Girls' Education Challenge, show that literacy levels for 14 and 15 year-old girls were equivalent to the expected reading proficiency levels for 7 year-olds. The average difference in literacy scores between 14-15 and 9-11 year-olds was only 27 [words per minute], equivalent to less than 1.5 years of schooling, even though 14-15 year-old girls have spent between four and five additional years in school. The findings suggest that that the literacy gap increases as girls get older (Coffey International Development, 2015).

Learning outcomes for 15-year olds in middle and higher income countries, as measured by the Programme for International Student Assessment (PISA), show gendered patterns, with girls outperforming boys at reading in almost all cases, and boys outperforming girls in mathematics in around half of cases (UNESCO, 2012a). At the subnational level, learning outcomes are lowest among the poorest students and in many middle income countries the learning outcomes in rural areas are far below those in urban areas (UNESCO, 2014).

In conclusion, whilst some whole countries can be considered as 'high risk environments' for limited access to secondary education for girls, wide inequalities within countries mean that there are other 'high risk environments' found within better performing countries, particularly in poor rural areas.

7. Implications of non-compulsory secondary education for girls

We found very few studies in the literature regarding the impact of compulsory secondary education on girls. Two studies presented in the reviews of evidence include one on the extension of compulsory education in Turkey from five to eight years (Tayfur et al., 2012 cited in Sperling and Winthrop, 2015) and an analysis of a 1968 policy reform in Taiwan that extended tuition-free, compulsory schooling from six to nine years (Spohr 2003 cited in King and Winthrop, 2015). The study in Turkey found a significant decrease in early marriage and early childbearing among girls under 16. From this it could be inferred that girls are more at risk of early marriage and childbearing where secondary education is not compulsory.

The study in Taiwan found that the reform had greater impact on boys, with an average increase of 0.4 years of schooling for males, and 0.25 years for females. Attempts to universalise secondary education in Uganda have been more beneficial to boys than girls (Barungi and Kasire, 2013). In sub-Saharan Africa as a whole, there was a large increase in secondary school enrolment between 1999 and 2009 (GER rose from 26% to 39%) but boys enjoyed a greater increase in enrolment than girls, and the GPI actually fell slightly during that period (from 0.82 to 0.81) (UIS data[4]). King and Winthrop (2015) note that it is important to apply a gender lens to national legislation and development plans to ensure gender equality in expansion of secondary education. They point out the need to check for coherence between compulsory education laws and early marriage laws, and the need for monitoring systems that collect and analyse data relating to gender issues.

According to the data in the Education for All Global Monitoring Report 2015 (UNESCO 2015b), among the 28 countries where DFID works, there are 4 countries where the age range of compulsory education does not extend beyond 11 year olds:
- Bangladesh,
- Iraq,
- Myanmar, and
- Sierra Leone.

There are a further 6 countries where the age range of compulsory education does not extend beyond 13 year olds:
- Mozambique,
- South Sudan,
- Sudan,
- Tanzania,
- Uganda, and
- Zambia.

(No data are given for Kenya, Malawi, Nepal, Somalia, Zimbabwe.)

However, secondary education is compulsory in many other countries with very low secondary enrolment rates for girls, for example, Afghanistan, Democratic Republic of Congo, Pakistan, Rwanda and Yemen (see Section 6). Making secondary education compulsory in law is clearly not sufficient to ensure girls' enrolment in secondary school. Regarding Pakistan, King and Winthrop (2015) note that:

> Single-sex classrooms with female teachers, boundary walls, and separate latrines in schools may be the only way to bring more girls to school in some communities. Indeed, because of strong social taboos, simply imposing a compulsory education law and eliminating fees may not be sufficient to increase girls' schooling in those settings. (p.27)

---

[4] UNESCO Institute for Statistics, downloaded from http://www.uis.unesco.org 3/11/2015

8. Implications of the costs associated with secondary education for girls

School fees

From their extensive review of the evidence, Sperling and Winthrop (2015) conclude that the most direct and fastest way for governments to boost girls' enrolment is to ban schools from collecting fees.

A review of evidence on post-primary education in developing countries (Banerjee et al., 2013) finds that:

> The body of evidence on price reductions produces a general conclusion: students' school attendance and completion are sensitive to the price of schooling. Indeed, every price reduction study reviewed … finds positive impacts of price reductions on students' school attendance and/or completion. Students who have lower baseline levels of access to school—frequently girls—also appear to be more responsive to these types of interventions. (p21)

Regarding the impact of price reduction on learning outcomes the review concludes:

> The evidence on the effects of price reductions on student *performance* is less conclusive. A leading explanation for the null findings in student achievement involves the changing composition of the student body due to the program. (p21)

In Kenya, secondary enrolment increased dramatically in 2008 following the introduction of a fee-free policy. However, although free secondary education led to an overall increase in enrolments, it did little to close the persistent gender gap in access. Girls' lower mean scores in the Kenya Certificate of Primary Education are one of the reasons fewer girls enrol in secondary school. This suggests that free secondary education is not likely to narrow the persistent gender gaps in access to secondary education unless the government also addresses gender gaps in performance in primary education (Ohba, 2009).

In Uganda, government schools became fee free under the Universal Post Primary Education and Training (UPPET) programme launched in 2007. However the programme only covered fees for those scoring well in their primary leaving examination. Most of secondary school access was in the fee charging private sector. Girls' net enrolment in secondary school did not change between 2005 and 2009 whereas boys' net enrolment increased from 22 to 25%, widening the gender gap. There is considerable dropout at secondary level and the high cost of schooling was the most frequently cited reason for leaving school (Barungi and Kasirye, 2013).

A systematic review of the evidence of the impact in the medium to longer term of the abolition of school fees in low-income developing countries (Morgan et al., 2012) looks at five studies of fee elimination, but only one focuses at the secondary school level. Baird et al. (2009) evaluate the elimination of tuition fees, through an NGO intervention targeted to secondary schoolgirls in a particularly poor district in Malawi. The programme had large impacts on school attendance: Re-enrolment rate amongst those who had already dropped out of school before the start of the programme increased by 2.5 times and the drop-out rate amongst those in school at baseline decreased from 11 percent to 6 percent. Strong enrolment impacts associated with eliminating tuition fees for secondary schoolgirls were not responsive to increasing the amount of an additional cash transfer made to the girls.

Other direct costs

Even where secondary schools are fee free in policy, they may be other significant charges made by schools that can limit access. A study in Rwanda (Williams et al., 2015) found that significant other costs included the cost of sitting the national exam (approximately $12), other examinations ($1 to $3) and PTA "contributions" (approx. $3 per term), which were mainly seen as a teacher subsidy. In addition, households are expected to purchase many non-discretionary items (uniforms, exercise books, stationery, etc.), as well as discretionary costs, where there may be strong social expectations for families to pay. These additional costs can be a cause of dropout (GPE, 2013).

Ohba (2009) looks at free secondary education and the way that it influences access to education for the poor in rural Kenya. Data collected after the introduction of free secondary education show that government schools continue to levy fees for lunch, school buildings and boarding equipment. Households are also expected to provide non-discretionary items such as school uniforms, sports uniforms, books, stationary etc. The study found that the costs of the first year preparation for day secondary school are about 8 times the monthly income for employed parents, 12 to 17 times for self-employed parents and 19 to 20 times for peasant parents engaged in casual work. In the case of boarding schools, the costs of the first year preparation for boarding school are 15 times the monthly income for employed parents, 23 to 33 times for self-employed parents and 38 to 40 times for peasant parents engaged in casual work. The study found that poor households continue to face significant challenges in meeting the costs of 'free secondary education'. Moreover, government bursaries for secondary education are awarded to children enrolled in boarding secondary school only; children whose households cannot raise the initial and ongoing costs required for even low-cost day secondary schools face substantial challenges in accessing secondary education. The paper concludes that government policies aiming to expand access to secondary education for the poor must strive to identify and target socially disadvantaged children who are in need of financial help to access secondary education.

Opportunity costs

The opportunity costs of sending girls to secondary school can be considerable given that:
- o   Adolescents have a greater potential than primary-aged children to contribute to unpaid and paid work to support a household.
- o   Girls tend to take on a larger proportion of domestic household labour and sibling care than boys (GPE 2015).

9. The impact of different delivery models on girls' enrolment, retention, completion and achievement.

Private schools

A rigorous review of the research into private schools in developing countries (Day et al., 2014) concludes that the evidence on gender parity in access to private schools is inconsistent. In some contexts (Pakistan, India and rural Kenya), girls were less likely to be enrolled in private schools than boys, but in a minority of studies from other contexts, private schools were found to reduce the gender gap.

In contexts where access to state funded secondary schools is selective, private schools often serve those who failed to get entry into government secondary schools due to low examination grades at primary school-leaving examinations. A study into the destination of primary school graduates in Kibera, Kenya found that more girls than boys were enrolled in private secondary schools because they performed less well in the KCPE than boys and thus did not meet the more stringent admission requirements of government secondary schools (Ohba, 2013). In cases like this, high proportions of girls in the private sector may be more

indicative of gender inequality in primary school learning experiences than of girl-friendliness in the secondary private school sector.

A study into lower cost private secondary schools in Malawi (Zeitlyn et al., 2015) found that while private schools provide access to secondary school for some children who fail to obtain places in government schools, they do not provide sustainable quality secondary education that could be extended to children outside the top quintile of household wealth.

In Pakistan, there is evidence that girls have substantially and significantly poorer access to private schools than do boys. Research found a large and statistically significant pro-male bias in *within*-household education expenditure allocations (Aslam, 2009).

Public private partnerships

Banerjee et al. (2013) review a voucher programme in Colombia that awarded lottery winners a voucher that partly covered the fees of private school. Three years later, lottery winners were more likely to be attending a private school and the effect was larger for girls. Winners were more likely to have completed three years of secondary school and girls' test scores were significantly higher than those who did not receive vouchers. The authors of the review point out the importance of context when considering schemes that promote publically funded but privately provided education:

> On the public/private dimension, the Colombia voucher experiment was quite successful (students who went to private schools did better in life), but this was in a context where there was a supply of pre-existing relatively high quality private schools with some excess capacity. Would that also be true in a place like Pakistan, where the supply of high-quality private schools is extremely limited, especially at the post-primary level, and there is probably not much excess capacity in the system? (p.51)

Analyses of public private partnerships (PPPs) in Pakistan include the following:

Malik, A. (2010) Public-Private-Partnerships in Education: Lessons learned from the Punjab Education Foundation Asian Development Bank.
http://www.adb.org/documents/reports/ppp-education-punjab/ppp-education-punjab.pdf
According to the author, the PPPs have encouraged the private sector to be pro-poor and to improve gender equity in schools.

Irfan, S. (2010) Public Private Partnerships and Educational Outcomes in Pakistan: A gendered perspective RECOUP Policy Brief.
http://recoup.educ.cam.ac.uk/publications/pb9Annfinal.pdf
This briefing draws from qualitative research which looked at access to quality education in Pakistan, for boys and girls. It finds that parents prefer to send children to private schools and would pay for it if possible. However, this becomes more difficult at the secondary level when fees increase. Also, distance to schools becomes a problem for girls' education and there is a preference for girls-only schools. However the quality of education for girls is not as good as that of boys in private schools, thus affecting their learning outcomes. Other factors that emerged as important included gender differences in terms of parent interactions with school and the need for functional institutions for parent-teacher interactions.

Community based secondary schools

Community based schools, constructed and run with community participation, have been found to be a successful model for increasing girls' enrolment and retention at primary level, especially poor girls in rural communities (Sperling and Winthrop, 2015).

Rose (2007) considers the *Harambee* secondary schools in Kenya. These were schools that were community built and owned but staffed with government teachers. These schools tended to be of lower quality than government schools. They provided access to more girls, gender inequalities in the quality of education remained. There were more boys in the better resourced government schools, and girls were over-represented in the low quality community schools.

Philanthropic and religious schools

A rigorous review of the evidence on the role and impact of philanthropic and religious schools in developing countries (Wales et al., 2015), finds that:

> Philanthropic schools often target female enrolment and achieve gender parity. There is more mixed evidence regarding religious schooling, specifically madrasas, with rising female enrolment and gender parity in some contexts, while in others enrolment continues to be male dominated. (Executive summary)

The review also finds strong evidence that philanthropic and religious schools reach the poor and marginalised, with stronger evidence in the case of philanthropic schools. Philanthropic schools often purposefully located in marginalised areas (e.g. slums). Religious schools often serve more marginalised areas and poor communities.

Regarding madrasa education in Bangladesh, the review notes that there is some evidence that this form of education was particularly effective at expanding secondary school access to girls in the most conservative districts. In these districts, the presence of madrasas were correlated with expanded female secondary enrolment, whereas there was no significant association with the presence of other, secular forms of schooling.

An innovative model that combines a philanthropic approach with public private partnership is described in Box 1.

10. Innovative models for addressing barriers to girls' secondary education

Sperling and Winthrop (2015) present numerous models that have been shown to be effective at improving girls' secondary education (see Table 5).

Table 5: Models for improving girls' education

General strategy	Model	Country
Reduce indirect and opportunity cost of schooling	Female stipend program	Bangladesh
	Oportunidades	Mexico
	Punjab Female School stipend program	Pakistan
	Japan Fund for Poverty Reduction Scholarship Program in Cambodia	Cambodia
	Colombia Education Voucher Program	Colombia

	Zomba Cash Transfer experiment	Malawi
	Conditional Subsidies for School Attendance	Colombia
	The Girls' Scholarship Program	Kenya
Reducing time and distance to school	Escuela Nueva	Colombia
	Chief Minister's Bicycle Program	India
Eliminate School-Related Gender-Based Violence	Establishing reporting mechanisms for SRGBV	Nigeria, Tanzania
	Training and publicizing (through murals) the teacher code of conduct	Sierra Leone
	USAID's Safe Schools Program	Ghana and Malawi
Providing learning opportunities outside the classroom	Use of mobile phones to catch up on missed lessons and search the internet	Kenya
Improved linkages to labour markets	Stronger Bridges to Work: linking business process outsourcing recruiting services with adolescent girls	India
Making schools girl friendly	The Prerna Girls School	India
Providing girls with female mentors and role models	Reserved places for women in village leadership elections	India
	Camfed bursary alumni network (CAMA) and learner guide	Zimbabwe, Tanzania, Ghana
Female empowerment	Negotiating a better future	Zambia

Source: Sperling and Winthrop, 2015 *What works in girls' education: evidence for the world's best investment.* Washington: Brookings Institution.

Social safety net programmes

Some of the education cost reduction strategies profiled by Sperling and Winthrop (2015) and mentioned in Table 5 above were part of wider social safety net programmes, aimed at providing the poorest households with targeted benefits to support them to access health and education services. Such programmes have been widely used in Latin America and are becoming increasingly common in other developing country contexts. A paper by García-Jaramillo and Miranti (2015) reviews a range of social safety net programmes, looking at the impact on education, and the effectiveness of the targeting strategies for reaching the poorest households. In general, social safety net programmes have a positive impact on girls' enrolment and attendance with the impacts larger for secondary schooling. The most effective programmes were found to be conditional cash transfers, fee waiver or food provision (school feeding or take home rations).

One exception was the *Hopeful Family Program* in Indonesia, which included cash transfers conditional on school attendance. Whilst the programme had a modest positive impact on attendance of students already enrolled, it had no significant impact on enrolment, transition to secondary school or dropout. This may have been because the payment schedule did not coincide with the annual school fee payment schedule, because the transfers were too low, or because junior secondary schools were too far away from the poorest households.

Targeting transfers to the poorest remains a challenge in many such programmes. The paper explores two types of targeting errors: exclusion errors, where very poor households miss out on transfers, and inclusion errors where households that are above the poverty line receive the transfers. They found that inclusion errors, which can be considered as leakage of resources to non-target beneficiaries, were high, particularly in Latin America where all four schemes reviewed had inclusion errors above 50%. Exclusion errors, where the most

marginalised households were missed out, were also high, ranging from 28% for the Child Support Grant in South Africa, to 67% for *Chile Solidario*. The authors suggest a number of ways to reduce exclusion errors, thus ensuring that more of the most marginalised families benefit.

- Have a strong communications campaign
- Have permanent, accessible registration sites
- Take care that documentation requirements for registration do not exclude the most needy.

They note that in the South African programme, maternal orphans appeared to be particularly vulnerable to missing out on the child support grant.

11. Secondary education for the most marginalised girls

There is extensive evidence that disadvantage is compounded by being a girl. Whilst the gender gaps in enrolment at the global and, in most cases, at the national level are small, gender gaps to the detriment of girls tend to be wider within the most marginalised populations: the extreme poor, those living in remote areas, marginalised linguistic and ethnic groups, those living in areas affected by conflict and those with disabilities.

Marginalised groups that feature extensively among people with the greatest degree of educational poverty include children from ethnic minorities, poor rural females and children with disabilities (Bhatkal et al., 2015). Geographic and ethnic disadvantages are often superimposed on each other with many ethnic minorities living in remote areas.

Girls in socially excluded groups are doubly disadvantaged since gender gaps in socially excluded groups tend to be wider than in the dominant group(s). However, not many programmes concentrate of both forms of disadvantage together, and of those that do, few are rigorously evaluated (Lockheed and Lewis, 2012).

Poor girls in rural communities.

At the primary level, a range of models of community-based schooling have been successful at increasing girls' enrolment and retention (see Section 9). Sperling and Winthrop, (2015) describe a number of successful models of community-based primary education for poor rural girls:

- Community consultation and participation enabled new 'genderless' schools to be set up in remote areas of Balochistan in Pakistan. In 1994, 198 community schools were established giving access to 10,000 rural girls.
- BRAC's community schools account for 50% of total enrolment in rural areas of Bangladesh. These schools help the most needy children, especially girls, to transition into the public system.
- The Escuela Nueva programme in Colombia established multigrade community schools that contributed to a 30% increase in rural enrolment.
- A community school programme in Mali increased girls' enrolment by 67%. Communities were involved in the construction and running of the schools. Schools teach a locally relevant 'life skills' curriculum and the local language is used for instruction. The cost per student at community schools was 86% of the cost per student at regular district schools.
- Community schools in rural areas of upper Egypt increased enrolment and performance in national examinations.

It is more difficult to find examples of successful community-based secondary schools in low income countries (see Section 9 on community schools). The need for subject specialists at secondary level makes it more difficult for rural communities to source and retain teachers,

and more difficult to operate small schools with catchment areas small enough to allow day schooling. However, the important role of community based primary schooling in giving young rural girls the opportunity of completing primary school and being eligible for secondary education should be noted.

None of the literature reviewed presented evidence of the cost effectiveness of using hostels or boarding schools to provide secondary education for girls from remote communities. Lloyd and Young (2009) note that boarding is a 'promising but unproven' strategy for enabling adolescent girls to access education. The costs associated with attending boarding school, even officially fee-free boarding schools, are often prohibitive to the poorest (see Section 8 on costs and Ohba, 2009).

Some social safety net programmes have, at least initially, specifically targeted the rural poor. The *Progresa* programme in Mexico (later renamed *Oportunidades)* was a social protection programme that provided a mixture of conditional cash transfers to mothers in poor rural communities. The programme targeted the poorest families in the poorest communities. Communities were selected using administrative and census data to determine the poorest and least likely to experience economic growth. Further selection was conducted at household level, on the basis of a census of all households in the identified communities. Two thirds of households in the selected communities were classed as 'poor' and eligible for the transfers (Schultz, 2004). Families received one set of transfers conditional on obtaining preventative medical care, and a second set conditional on school attendance. Children in higher grades and girls were applicable for higher transfers. The programme was run as a Randomised Control Trial and was found to increase years of schooling by 0.66 years on average for children from participating households. The largest increases were found for children at the transition from primary to lower secondary, with girls' enrolment rate at this grade increasing by 15 percentage points. At the transition grade, girls benefitted more than boys. Further analysis and economic modelling indicated that the programme could be more cost effective if it focused cash transfers on attendance in the higher grades (Banerjee et al., 2013; Sperling and Winthrop, 2015).

The BRAC female stipend programme in Bangladesh also initially targeted poor rural girls, and evaluation of the programme showed that those from the poorest households (the land poor) tended to gain the greatest benefit (Sperling and Winthrop, 2015).

A programme that provided girls with bicycles in India increased girls' age-appropriate enrolment in secondary school by 30 percent, reduced the gender gap in age-appropriate enrolment by 40 percent and increased the number of girls staying in school long enough to take the secondary school certificate examination by 9.5 percent. Girls each received around $40 to purchase bicycles and schools collected receipts to show how the funds had been used (Sperling and Windthrop, 2015).

Distance education approaches

The 2012 *Education for All Global Monitoring Report* (UNESCO, 2012a) describes a number of examples of distance and open secondary education programmes. These include the following:

- India's *National Institute of Open Schooling.* This targets women, lower castes, scheduled tribes and the poor and reaches over 300,000 learners annually. However the fees may limit access for the poorest.
- *The Namibian College of Open Learning.* This provides nearly half of all places at upper secondary school are provided through the. It caters for over 30,000 students each year, mostly aged 18 to 24, and almost 70% are female. Students are provided with printed self-study materials, access to study premises, weekly tutorials and periodic workshops.

- *Telesecundaria* in Mexico. Through this programme, learners, particularly those in poorer rural areas, have access to the lower secondary (Grade 7-9) curriculum using television and the internet. In 2010 the programme enrolled 1.26 million learners, equivalent to 20% of secondary enrolment.

The report concludes that countries where open and distance secondary education have been used successfully to reach the most disadvantaged have tended to have good infrastructure and technology and a wide network of institutions for programme delivery.

An example of a programme from a less developed context is the Sindh Radiant Organization (SRO)'s *Girls Secondary School Certificate* project. This provides a distance education programme for girls in remote parts of Sindh Province. Girls are registered with the nearest government secondary school but study in local community coaching centres. Each centre is staffed by two specially trained female teachers. Teacher supervisors and officers from SRO and the education department make regular visits. The project has taught around 600 girls in 18 centres.[5]

Girls with Disabilities

Available data, most focused on literacy rates rather than schooling, indicate that women and girls with disabilities fare less well than either their disabled male or non-disabled female counterparts. The biggest barrier to educational equity for girls with disabilities may be their invisibility (Rousso, 2003).

Girls with disabilities are one of the groups targeted by USAID's Ambassadors Girls' Scholarship programme, but there is evidence from Sierra Leonne and Djibouti that this programme has given rise to envy among non-recipients who were equally needy and qualified, and in some cases this led to non-recipients becoming disillusioned and dropping out (King and Winthrop, 2015).

This review found almost no evidence of the effectiveness of programmes aimed at getting girls with disabilities into secondary school in low income countries. This may be because very few girls with disabilities in these contexts make it through to the end of primary school.

Girls affected by conflict and natural disasters.

Conflict serves to reinforce educational disadvantage associated with poverty and gender (Sperling and Winthrop 2015). It can exacerbate negative behaviours that act as a barrier to girls' education including increased levels of child marriage and increased practice and acceptance of gender based violence UNESCO (2015a). Following natural disasters, girls are often more likely to drop out of school than boys (Plan International, 2013).

In their rigorous literature review of education in crisis affected contexts, Burde et al. (2015) found that research on access to secondary school and vocational training for youth is extremely limited. They found strong evidence supporting the use of community-based education for girls to access primary education, and observational studies indicating the potential of providing female teachers, girls-only schools, accelerated learning programmes, and approaches to distance learning for primary, over-age, and secondary students. In Afghanistan, school boundary walls appear to be an important factor in supporting secondary schooling for adolescent girls as they provide both added security and privacy.

---

[5] http://www.educationinnovations.org/program/girls-secondary-school-certificates

Minority language speakers

There is evidence that girls stay in school longer, and are more likely to transition to secondary school, if they are taught first in their mother tongue or home language (Human Development Resource Centre, 2011). One strategy suggested by Lewis and Lockheed (2012) is to provide preschool education in mother tongue which can help to prepare minority language speakers to transition into formal education in a second language. This strategy could help in situations where minority language primary education is not possible. Whilst there is extensive literature on mother tongue education, it does not tend to focus on secondary education or gender equality aspects of education.

12. Transitions from non-formal to formal education

When children have missed out on basic education, and are too old for easy (re-)integration into primary schools, non-formal education (NFE) and second chance programmes can offer a route back into formal education or further training. A common strategy in situations of protracted conflict and crisis is to run Accelerated Learning Programmes (ALPs) which deliver a condensed version of the school curriculum for out-of-school youth, with the aim of providing them with the basic learning foundations and enabling them to re-enter the formal school system.

In their rigorous review, Burde et al. (2015) found that whilst there was a great deal of grey literature and project evaluations of ALPs, there were no experimental or quasi-experimental studies and no longitudinal studies. Evidence from the evaluations indicated that ALPs have been effective at enrolling over-age and out-of-school youth, particularly populations that have been typically marginalised or stigmatised (for example, girls, former child combatants). There is also some evidence that ALPs have higher participation and completion rates than formal schools in some contexts. But longitudinal studies, which would be needed to understand transitions from ALPs to formal school, and retention within the formal system, are lacking. Sperling and Winthrop (2015) also note that while there is evidence to show that non-formal programmes are generally effective at reaching very marginalised girls, there is a lack of empirical research into the effectiveness of the various components of non-formal schooling in helping girls return to formal schooling.

A review of ALPs by Longden (2013) included 15 different programmes and considered 5 in detail. Rates for the reintegration of graduates into the formal system are given for the Malawi Complementary Basic Education Programme (57% of the intake entered formal school) and the School for Life programme in Ghana. This latter programme provides a nine month course in basic literacy and numeracy, taught using mother tongue as the medium of instruction. It targets children aged 8 to 14 in rural communities in northern Ghana with high rates of out-of-school children, and aims to prepare graduates for integration into Grade 4 of primary school. Around 44% of students in the programme are girls, giving the programme greater gender parity than in the equivalent grades in formal schools in the north (Hartwell, 2006). Initially the programme saw low transition rates to primary schools (47% in 1996-7) but this had risen to 91% in 2008-10. School for Life graduates performed better than average in a Grade 6 national assessment of English and Mathematics. However, completion rates of School for Life graduates in primary schools and transition rates to secondary school are not known (Longden, 2013). Graduation and reintegration rates were similar for boys and girls (DFID Ghana, 2013).

Some organisations and governments have implemented 'bridge year' approaches aimed at facilitation the transition of non-formal education learners, especially girls, into formal schools. A study by UNESCO (2012b) describes a number of such approaches.
- The Gambian Re-entry programme for girls provides tuition, scholarships, guidance and counselling to support them to reenter formal education.

- The non-formal education equivalency programme in Indonesia offers girls who have not completed secondary education a range of courses with varying amounts of academic and vocational content. It is delivered via a range of learning modalities, including home schooling for young mothers/ married girls. The programme includes a mobile class for girls affected by disasters.

The majority of ALPs are aimed at covering the primary school curriculum, but there are a growing number of ALPs, and other non-formal education programmes covering secondary education. Examples of these include the following:
- Africa Education Trust's Accelerated Secondary Education for Women in South Sudan provides women with a part-time course allowing flexible learning, enabling students to continue with work. Learners receive 2-3 hours per day tuition, self-study materials and one-to-one support from teachers. The programme has been piloted with 50 young women.[6]
- Malawi Access into Teaching Scholarships, supported by the Open University, targets girls who have completed secondary education but have not achieved the grades needed to enter formal teacher training courses. A one-year upgrade course via distance learning prepares the girls to retake their secondary school leaving exams and prepare for application to teacher training. Distance learning means girls can stay with their families and gives people in rural areas the same access. Girls also gain first-hand classroom experience through a Teaching Assistant placement in a local primary school supported by a mentor from the school's teaching staff.[7]

The 2012 *Education for All Global Monitoring Report* (UNESCO, 2012a) describes a number of examples of 'second chance' programmes aimed at providing rural youth, particularly women, with basic literacy and numeracy skills. The Complementary Basic education programme in Malawi, for example, targets children and youth aged 9 to 17 who have never enrolled or dropped out before grade 5 of primary school. Most of those enrolling initially were over 14, and many marginalized youth were reached including orphans and young mothers. However, only around a third of the older learners were female. The curriculum covers basic numeracy and literacy, agriculture, life skills and entrepreneurship. Most students complete the course and/or (re-)enter formal school. A second example given in the report comes from Egypt, where the *Ishraq* programme provided literacy and numeracy skills for at least 2,500 out-of-school girls aged 13 to 15. Of the initial 277 girls in the pilot phase, 69% of those who completed the programme transitioned into formal schooling. However, whilst the report gives these examples of promising practice, it notes that the impact of second chance programmes has been limited.

13. Annotated bibliography

Key sources

Sperling, G. and R. Winthrop. 2015. *What works in girls' education: evidence for the World's best investment*. Washington: Brookings Institution.
This evidence-based book presents the findings of the most recent research of what works for female enrolment, attendance, learning, and empowerment in developing nations. Whilst highlighting the importance of a high-quality secondary education for all girls, successful programmes which cover primary, secondary, technical and non-formal education have been included. As an updated version of the 2004 What Works in Girl's Education book (Herz and

---

[6] http://africaeducationaltrust.org/accelerated-secondary-education-for-women/
[7] http://www.open.ac.uk/about/international-development/ido-africa/development-programmes-africa/mats

Sperling) new studies are combined with previous research to offer a comprehensive database of programmes along with the identification of challenges. Recommended areas of focus include ensuring high-quality education, enabling girls to complete secondary school and supporting out-of-school adolescent girls, reducing violence against girls, supporting the transition from school to work and empowering girls to lead.

The methodology for the book involved selecting studies through searches of academic databases, online resource depositories, nongovernmental organisations' websites and discussions with experts. From almost 1,000 initial studies and documents, 138 were identified for in-depth review based upon their relevance to girls' education and the rigour and validity of the research conducted.

Studies demonstrate that girls continue to face economic, cultural and safety barriers. In presenting the key findings of what works in overcoming these barriers, having affordable, local and girl-friendly schools is key to increasing enrolment. Meanwhile the quality of schooling, community engagement and increasing the demand for and supply of secondary education are essential to improve girls' retention and learning outcomes. Research since the last book in 2004 has questioned the role of certain aspects of girl-friendly schools, whilst more recently studied areas, such as resilience to natural disasters and management of the effects of climate change, have been shown to be effective.

Unterhalter, E., North, A., Arnot, M., Lloyd, C., Moletsane, L., Murphy-Graham, E., Parkes, J. and Saito, M. (2014). *Interventions to Enhance Girls' Education and Gender Equality.* **Education rigorous literature review, UK Department for International Development, London.**
http://r4d.dfid.gov.uk/pdf/outputs/HumanDev_evidence/Girls_Education_Literature_Review_2014_Unterhalter.pdf

The literature review investigates the types of interventions that research evidence indicates can improve girls' education from primary through to post-secondary levels. The Theory of Change (ToC) takes into account processes and factors at the school, local, national and global level which affect girls' education, with selected interventions organised into the following categories:
> i. resources and infrastructure
> ii. changing institutions; and
> iii. changing norms and including the most marginalised in education decision making.

A total of 169 research studies published since 1991 were systematically reviewed using databases, website searches networks, multilateral agencies and large NGOs to identify both formal research studies and grey literature. Criteria were established for including and weighting the studies for a number of focus countries: Morocco, Tunisia, Peru, Ethiopia, Ghana, Tanzania, Malawi and Bangladesh. The conclusions do not explicitly distinguish between successful primary and secondary interventions, although there were similar numbers of primary (51) and secondary (51) studies considered. A further 49 studies concerned both primary and secondary, although for 19 studies the specific level was not given.

The review found that, for interventions concerned with resources, the targeting of resources and programme design are important factors, whilst for successful infrastructure interventions, teaching and learning processes increase their effectiveness. Conditional transfers in particular can have positive effects on enrolment and achievement. A 'quality mix' of concern with gender equality, learning materials and supporting teachers to improve girls' education through formal teacher training is associated with effective institutional change and policy interventions. However, interventions concerned with changing gender norms and inclusion, despite holding potential, are under-researched and under-resourced.

14. References

Andrabi, T., Das, J. and Khwaja, A.I. (2011). *Students today, teachers tomorrow? Identifying constraints on the provision of Education*. World Bank Policy Research Working Paper Series 5674.

Aslam, M. (2009). *The relative effectiveness of government and private schools in Pakistan: are girls worse off?* Department of Economics, University of Oxford, Oxford.

Baird, S., McIntosh, C. and Ozler, B. (2009). *Designing cost effective cash transfer programs to boost schooling among young women in Sub-Saharan Africa.* World Bank Policy Research Working Paper Series 5090. Washington, DC: World Bank.

Banerjee, A.V., Glewwe, P., Powers, S. and Wasserman, M. (2013). *Expanding Access and Increasing Student Learning in Post-Primary Education in Developing Countries: A Review of the Evidence*. Abdul Latif Jameel Poverty Action Lab (J-PAL). http://www.povertyactionlab.org/publication/expanding-access-and-increasing-student-learning-post-primary-education-developing-count

Barungi, M. and Kasirye, I. (2013), *Improving girl's access to secondary schooling.* No. 159674, Research Series, Economic Policy Research Centre (EPRC).

Birungi, H.; Undie, C., MacKenzie, I.; Katahoire, A., Obare, F. and Machawira, p. (2015). *Education Sector Response to Early and Unintended Pregnancy: A Review of Country Experiences in Sub-Saharan Africa.* STEP UP and UNESCO Research Report.

Burde D., Guven O., Kelcey J., Lahmann H. and Al-Abbadi K. (2015). *What Works to Promote Children's Educational Access, Quality of Learning, and Wellbeing in Crisis-Affected Contexts. Education Rigorous Literature Review*. Department for International Development.

Coffey International Development (2015). *Baseline Report: Step change window*. Evaluation Manager Girls' Education Challenge Fund. London: UK Department for International Development.

Day, A., Mcloughlin, C., Aslam, M., Engel, J., Wales, J., Rawal, S., Batley, R., Kingdon, G., Nicolai, S. and Rose, P. (2014). *The role and impact of private schools in developing countries: a rigorous review of the evidence.* Final report. Education Rigorous Literature Review. Department for International Development.

DFID Ghana (2013) School for Life Project Completion Report. Accra: DFID Ghana.

García-Jaramillo, S. and Miranti, R., (2015) *Effectiveness of targeting in social protection programs aimed to children: lessons for a post-2015 agenda*. Paper commissioned for the EFA Global Monitoring Report 2015, Education for All 2000-2015: achievements and challenges

Global Partnership for Education (2013). *Accelerating Transition of Girls to Secondary Education: A Call for Action*. Global Partnership for Education: Washington.

Hartwell, A. (2006). *Meeting EFA: Ghana School for Life*. USAID EQUIP2. http://www.equip123.net/docs/e2-GhanaCaseStudy.pdf

Human Development Resource Centre (2011). *Mother Tongue Education and Girls and Poor Children*. Department for International Development. http://www.heart-resources.org/wp-content/uploads/2011/11/Mother-Tongue-Education-Girls-Poor-Children-November-2011.pdf

Irfan, S. (2010) *Public Private Partnerships and Educational Outcomes in Pakistan: A gendered perspective***.** RECOUP Policy Brief.
http://recoup.educ.cam.ac.uk/publications/pb9Annfinal.pdf

King, E., and Winthrop, R. (2015). *Today's Challenges for Girls' Education*. Washington: Brookings Institution.

Lewis, M. and Lockheed, M. (2008). *Social exclusion and the gender gap in education.* Policy Research Working Paper 4562. Washington: The World Bank

Lockheed, M and Lewis, M. (2012) Addressing primary and secondary education for socially excluded girls. In Heymann, J. and A. Cassola (eds), *Lessons in Educational Equity: Successful Approaches to Intractable Problems Around the World*, pp 116-141.

Lloyd, C.B., and Young, J. (2009). *New Lessons: The Power of Educating Adolescent Girls— A Girls Count Report on Adolescent Girls.* New York: Population Council.

Longden, K., (2013) Accelerated Learning Programmes: What can we learn from them about curriculum reform? Paper commissioned for the EFA Global Monitoring Report 2013/4, Teaching and learning: Achieving quality for all"
http://unesdoc.unesco.org/images/0022/002259/225950e.pdf

Malik, A. (2010) *Public-Private-Partnerships in Education: Lessons learned from the Punjab Education Foundation***.** Asian Development Bank.
http://www.adb.org/documents/reports/ppp-education-punjab/ppp-education-punjab.pdf

Morgan, C., Petrosino, A., Fronius, A. (2012). *A systematic review of the evidence of the impact of eliminating school user fees in low-income developing countries*. EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

Ohba, A. (2009). *Does free secondary education enable the poor to gain access? A study from rural Kenya.* CREATE Pathways to Access Research Monograph No. 21. Brighton: University of Sussex.

Ohba, A. (2013). Do low-cost private school leavers in the informal settlement have a good chance of admission to a government secondary school? A study from Kibera in Kenya. *Compare: A Journal of Comparative and International Education*, 43(6), 763-782.

Plan International (2012). *State of the Worlds' Girls 2012: Learning for Life.* Woking: Plan International.

Plan International (2013). *State of the Worlds' Girls 2013: In double jeopardy: adolescent girls and disasters.* Woking: Plan International.

Postles, C. (2013) *Girls' Learning: investigating the classroom practices that promote girls' learning.* London: Plan UK

Porta, E., Arcia, G., Macdonald, K., Radyakin, S. and Lokshin, M. (2011). *Assessing Sector Performance and Inequality in Education: Streamlined Analysis with ADePT Software.* World Bank. https://openknowledge.worldbank.org/handle/10986/2326

Rose, P. (2007). *Supporting Non-state Providers in Basic Education Service Delivery.* CREATE pathways to access monograph no. 4. University of Sussex Centre for International Education.

Rose, P., and Al-Samarrai, S. (2001). Household constraints on schooling by gender: Empirical evidence from Ethiopia. *Comparative Education Review*, 45(1), 36–63.

Rousso, H. (2003). *Education for All: a gender and disability perspective.* Paper commissioned through the World Bank for the Education for All Global Monitoring Report 2003/4. http://unesdoc.unesco.org/images/0014/001469/146931e.pdf

Schultz, T. Paul. 2004. "School Subsidies for the Poor: Evaluating the Mexican *Progresa* Poverty Program." *Journal of Development Economics* 74: 199‑250.

Sperling, G. and Winthrop, R. (2015). *What works in girls' education: evidence for the world's best investment.* Washington: Brookings Institution.

UNESCO UIS (2015). *Fixing the broken promise of education for all: Findings from the Global Initiative on Out-of-school Children*. UNESCO Institute for Statistics. http://allinschool.org/wp-content/uploads/2015/05/oosci-global-report-en.pdf

UNESCO (2011). EFA Global Monitoring Report. *The hidden crisis: Armed conflict and education*. UNESCO http://unesdoc.unesco.org/images/0019/001907/190743e.pdf

UNESCO (2012a) EFA Global Monitoring Report 2012. *Youth and Skills: putting education to work*. UNESCO

UNESCO (2012b) *From Access to equality: empowering girls and women through literacy and Secondary education*. Paris: UNESCO.

UNESCO (2014) EFA Global Monitoring Report 2013/4. *Teaching and learning: achieving quality for all*. UNESCO

UNESCO (2015a). *Gender and EFA 2000-2015: achievements and challenges*. Paris: UNESCO.

UNESCO (2015b). The Global Monitoring Report 2015: *Education for All 2000-2015: Achievements and Challenges*. Paris: UNESCO

Unterhalter, E., North, A., Arnot, M., Lloyd, C., Moletsane, L., Murphy-Graham, E., Parkes, J. and M. Saito. (2014). *Interventions to Enhance Girls' Education and Gender Equality. Education rigorous literature review*, UK Department for International Development, London. http://r4d.dfid.gov.uk/pdf/outputs/HumanDev_evidence/Girls_Education_Literature_Review_2014_Unterhalter.pdf

Wales, J., Aslam, M., Hine, S., Rawal, S. and Wild, L. (2015) *The role and impact of philanthropic and religious schools in developing countries: A rigorous review of the evidence ODI/* UK Department for International Development, London.

Wells, R. (2009). Gender and age-appropriate enrolment in Uganda. *International Journal of Educational research,* 48(1), 40-50.

Williams, T.P., Abbott, P. and Mupenzi, A. (2015). 'Education at our school is not free': the hidden costs of fee-free schooling in Rwanda. *Compare: A Journal of Comparative and International Education*, 45 (6), 931-952.

Winthrop, R. and McGivney, E. (2014) The Top 10 List You Don't Want to Be On: Dangerous Places for Girls' Education. Education + Development blog, Brookings Institution .

downloaded from http://www.brookings.edu/blogs/education-plus-development/posts/2014/09/23-dangerous-places-girls-education-winthrop-mcgivney

World Bank (2012). *World Development Report 2012: Gender Equality and Development.* Washington: World Bank.

Zeitlyn, B., Lewin, K., Chimombo, J. and Meke, E. (2015) Inside private secondary schools in Malawi: access or exclusion?. *International Journal of Educational Development*, Volume 43, July 2015, pp 109-117.

15. Additional information

This query response was prepared by **Ruth Naylor (CfBT)**, and **Helen Mobey (CfBT)**

Contributors:
Laura Brown, IDS
Guilia Di Mattia, Minority Rights Group International
Sébastien Hine, ODI
Laura Hughston, Plan UK
Jacqui Mattingly, CfBT Education Trust
Anita Reilly, IRC