

What Works in Girls' Education in Ghana

A critical review of the Ghanaian and international literature



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Ghana's economic future looks bright. Education is a necessary prerequisite for all citizens to be able to contribute to and benefit from the dividends of this development. The returns from educating girls – in terms of health, social and economic outcomes – are well established. As such, the imperative of girls' education for Ghana has never been greater.

This critical review of the Ghanaian and international literature is designed to inform planning underway by the Girls' Education Unit in the Ministry of Education to help more girls and young women make the transition from primary to secondary school, and successfully complete Senior High School. It is part of a suite of products intended to support this planning, which also includes a costing analysis of girls' education strategies, an inventory and mapping of interventions over the last decade in Ghana, and a tool designed to help planners consider evidence-based variables when designing or vetting strategies designed to promote girls' education. A comprehensive bibliography accompanies this literature review.

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Acronyms

AfC	Associates for Change
BECE	Basic Education Certificate Examination
Camfed	Campaign for Female Education
CF	Catalytic Fund (Fast Track Initiative)
CR	Central Region
CRDD	Curriculum Research and Development Division
CRS	Catholic Relief Services
CS	Childscope
DEC	District Education Committee
DFID	Department for International Development
DP	Donor Partners
EFA	Education For All
ESP	Education Strategy Plan
FCUBE	Free Compulsory Universal Basic Education programme
FSP	Female Stipend Programme (Bangladesh)
FAWE	Forum for African Women Educationalists
FTI	Fast Track Initiative (renamed as Global Partnership for Education)
GES	Ghana Education Service
GEU	Girls' Education Unit
GOG	Government of Ghana
GPI	Gender Parity Index
ICT	Information Communications Technology
INGO	International non-governmental organisation
ISODEC	Integrated Centre for Social Development
JHS	Junior High School
M&E	Monitoring and evaluation
MDM	Mid-Day Meals programme
MOE	Ministry of Education
NGO	Non-governmental organisation
NR	Northern Region
PTA	Parent Teacher Association
QUIPS	Quality in Primary Schools Project
RCT	Randomised Control Trial
SAGE	Strategies for Advancing Girls' Education
SfL	School for Life
SMC	School Management Committee
SMT	Science, Maths and Technology
SHS	Senior High School
THR	Take Home Rations
USAID	United States Agency of International Development
VfM	Value for Money
WASH	Water, sanitation and hygiene
WFP	World Food Programme
WILDAF	Women in Law and Development in Africa
WUSC	World University Service of Canada

Section 1: Introduction

This document critically reviews the international and Ghana-based evidence on the impact of strategies for girls' education. It analyses the impact of common, historically used strategies, as well as more recent, innovative approaches. The review draws out lessons learnt, issues of cost effectiveness and key contextual factors (including policy, legal and regional). The report particularly focuses on synergies between the various strategies and their impact on girls' educational outcomes. Further, the report highlights the need to see gender as one of a range of *interacting* determining factors of educational access and outcomes, along with factors such as poverty, social and physical location.

The review's audience is the Government of Ghana - especially the Girls' Education Unit (GEU) – and its development partners, including the Department for International Development (DFID), which funded this study. At a time when there is a renewed focus on value-for-money (VfM), results and impact, the report aims to inform evidence-based policy making for all education stakeholders in Ghana. By providing a lens on 'beyond access' issues, the review directly feeds into wider Millennium Development Goals and Education For All (EFA) targets, and the Government of Ghana's most recent Education Strategic Plan (ESP), with its focus on learning outcomes, quality and equity in education.

Sources

The sources for this review were compiled through a comprehensive in-country search for all relevant 'grey' literature on education interventions from government, local non-governmental organisations (NGO), international NGOs (INGO) and donor partners, with particular support from the GEU and DFID. Advocacy briefs and non-empirical working papers from agencies were included in the review, but were treated as such rather than as 'hard evidence'; independent and peer reviewed research was prioritised. This was supported by a systematic 'key word' literature search for empirical research using academic databases including Eric and the British Education Index and established search engines, such as Google scholar. A full bibliography is provided as a separate document.

A comprehensive analysis of gender and education-related variables available from national data sets was undertaken concurrently to this literature review, and early findings provide insights from the Ghana EMIS (Joseph and Wodon, 2012a); National Education Assessment exam data and EMIS (Joseph and Wodon, 2012b), and the 2003 and 2008 Demographic Health Surveys (Nguyen and Wodon, 2012).

Caveats on the evidence base

To date, there has been a limited focus on assessing programmes and projects in terms of impact, and few studies take an explicit results-based or VfM focus. Much of the academic literature looks at what the issues/problems are and not how they have been addressed by which strategies and therefore 'what works'¹. Many programme evaluations measure their success in terms of inputs, not impact, and they are descriptive rather than analytical. In addition, few reports of INGO and agency interventions are external and often lack fine grained gender analysis. Furthermore, few studies look at a strategy/strategies' impact on

¹ Although there is little evidence of the impact of strategies in the literature, there is overwhelming consensus about the problems and barriers. This report does not address evidence of the benefits of girls' education: this is not its remit and it is well-summarised elsewhere (e.g. Summers, 1994; Herz and Sperling, 2004).

multiple outcomes e.g. enrolment, transition, learning, cost and return on investment, sustainability, regional implications, policy or other impediments/ opportunities. We have found that quite a lot of the literature is not actually designed for drawing sound lessons. However, it does of course offer ideas for further exploration, and some useful evidence. It is with caution that this section is offered as a piece of analysis that can infer any 'absolute' conclusions in the absence of concrete evidence. As such, this analysis particularly highlights gaps in the impact literature which may then be used to frame future directions for evaluation and research.

Despite the above caveat, impact-focussed studies are starting to emerge. The difficulty of isolating a particular intervention's impact to a specific change will, however, continue to challenge researchers and practitioners. In particular, girls' education strategies involving advocacy and 'soft' outcomes, such as empowerment or self esteem, are harder to measure and to isolate. This does not mean they have been less effective but that more work needs to go into building in ways to measure the impact of these programmes.

Although we have separated the strategies for the purposes of looking at costing and to try to isolate their impact, it is of course the case that in practice most of these strategies are delivered as part of a 'package' of interventions and indeed work best when part of a multi-pronged strategy. Synergies between the strategies are vital to their success, and this section will highlight these synergies throughout. Common sense tells us, for example, that reducing transport costs will do little to achieve gender equality in education if on arrival the school is not staffed. By the same token, gender sensitive training will be wasted if teachers or pupils do not turn up. Similarly, it is of course impossible to assess how much impact a strategy such as gender training for government staff or teachers, for example, may have had on indicators such as enrolment, retention and transition – and yet this does not mean it is not a worthwhile strategy. What we need to do is try and model what works in various contexts in terms of a combination of strategies. As Kane (2004) points out, the key to this is not a formulaic approach, but one of "thinking through" challenges and change. This review should act as the first step in this process.

A final note on the evidence base: when assessing impact, we should remember that many of the strategies for girls' education in Ghana and internationally often operate in extremely challenging conditions, responding to need to reach the most marginalised. For example, many programmes in Ghana work in the northern regions, where poverty is at its worst and cultural values at their most conservative. Results therefore sometimes may appear modest (especially if compared to average gains nationwide). This does not mean the given strategy is ineffective, and its potential impact needs to be analysed *in context*.

The organising framework of the analysis

After this introductory section, the report moves on to an overview of the education sector in Ghana, with a particular focus on gender. This section highlights some of the important regional differences in access, retention, transition and completion, as well as achievement. The third section briefly explores the main policy and legal issues that have a bearing on girls' education in Ghana: for example, big policy decisions that may have affected enrolment, transition and completion; government programmes that have or have not been aimed at affecting girls' education; and any current wider policy issues that may have a bearing on gender. Section four comprises the core of the document: a critical review of strategies for girls' education. The final section draws some overall conclusions and 'next steps'.

Section 2: Going to School in Ghana

This section provides some basic contextual information on the state of education in Ghana.

Spending overview

Spending on education in 2006 was 23% of government budget (EFA target was 20%) and 5.6% of GDP (EFA target was 6%)². The Fast Track Initiative (FTI) evaluation (Allsop et al, 2010) notes that funds are mostly allocated to salaries (65%), while administration, goods and services, and capital expenditures receive 5%, 10% and 20% respectively (2007 budget). The bulk of the expenditure is allocated to Primary (35%), while the second largest is allocated to tertiary (23%). Junior High Schools (JHS) receive 16% and Senior High Schools (SHS), 12% (MOESS, 2008). Non-government actors have also invested heavily in education in Ghana.

National overview: enrolment, completion, transition

Recent data from the Ministry of Education's draft 'Preliminary Education Sector Performance Report' provides a useful overview of the state of girls' education. The graphs on the following page offer a telling snapshot. Especially notable is the overall decrease in completion rates for girls at JHS; and the widening gap in the Gender Parity Index (GPI) moving from Primary, through JHS to SHS.

Data analysis

The Ghana Ministry of Education (MOE) performance report (2011), Lewin's (2011) summary of the Create project's work and Nguyen and Wodon's forthcoming quantitative study on the gender gap in education attainment in Ghana provide valuable analyses of Ghana's education data. Particularly important is the detail and nuance they provide on educational inequity in terms of social and geographic location. In summary, they highlight the following key issues:

- There have been huge improvements in enrolment for girls and boys at primary level. However, the following points represent areas of concern;
- Although there is virtual gender parity in enrolment at primary and JHS, the national gender ratio for completion of SHS is estimated at 67.5% – that is, two girls for every three boys complete SHS. This figure only improved by 0.44 of a percentage point between 2003 and 2008³.
- There is considerable over-age enrolment. More than 40% of children in Grade 1 are eight years old or more in a national sample. Repetition of grades is endemic in systems which have low completion rates, exacerbating the numbers of children over-age. Girls are especially disadvantaged by being over-age, and are more vulnerable to drop out, especially in communities where early marriage is common. International evidence is growing that students who are over-age for their grade learn less well and gain less learning with each year of school (Taylor et al, 2010). Further, it suggests that age diversity in the classroom can increase girls' vulnerability once they have reached puberty (e.g. Marteleto, Lam and Ranchhod, 2008);

² http://areghana.org/reports/edu_fin_factsheet.pdf

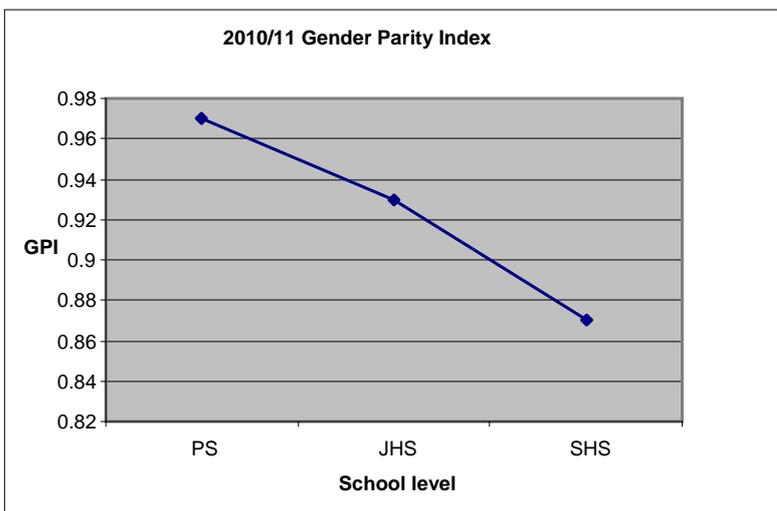
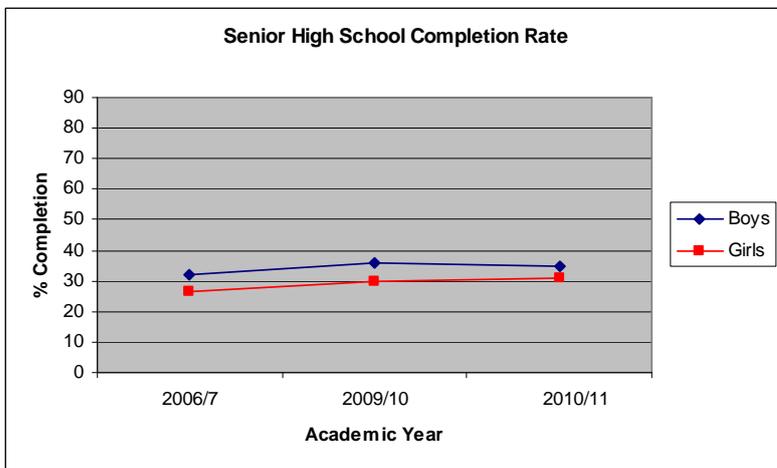
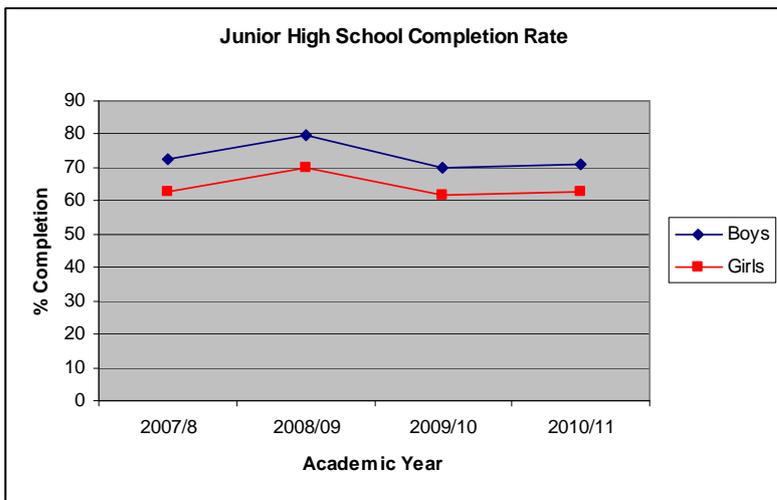
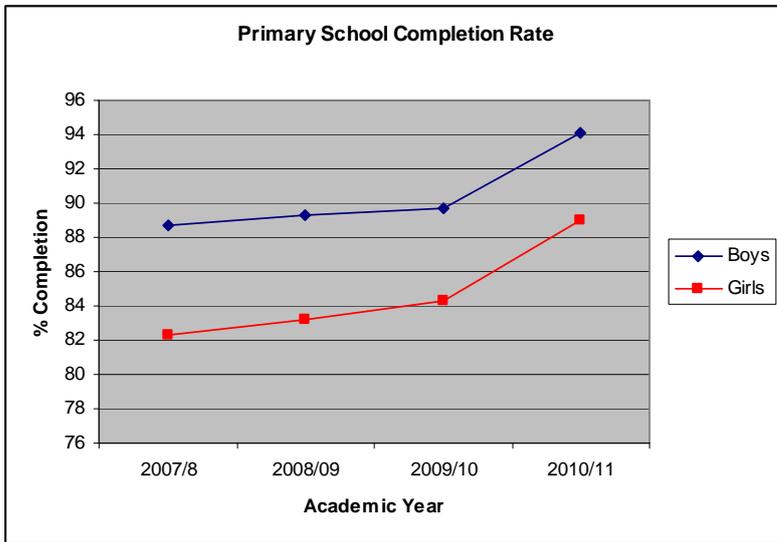
³ These are preliminary estimates from Nguyen and Wodon's (forthcoming) work, 'Analysing the Gender Gap in Education Attainment: A Simple Framework with Application to Ghana'. This study reaches its figure based on six conditional gender ratios for starting and completing primary, JHS and secondary school, enabling an assessment of whether the gender ratio is improving over time and where dropping out takes place.

- There is little or no pedagogic recognition of age grade slippage and the need for special support for over-age learners;
- Above JHS3 at entry to senior secondary school there is rapid attrition as costs rise and schools become selective. By JHS3 less than half the age group is enrolled;
- Serious issues remain with drop out, especially among girls. In fact, over the last decade, there has been little reduction in drop out and completion rates have remained largely unchanged (as the graphs in this document illustrate)⁴. Though nearly equal numbers of boys and girls enter Grade 1, girls drop out faster until Grade 6. If they enter JHS they drop out less than boys⁵; (e.g. Lewin, 2011 and Nguyen and Wodon, forthcoming, whose preliminary figures show that, nationally, those girls who start JHS had a higher likelihood than boys of completing the cycle – but only by one percentage point)
- Overall, the probability that children drop out of school increases with age, with the increase higher for girls than boys;
- There are striking social and geographic inequalities in enrolment, retention, transition and achievement, with important interactions between gender, poverty and location, as the following examples show: (a) at national level, the largest contributor to the lack of completion of senior high school – and also to the total gender gap in education attainment (in terms of enrolment, transition and completion) – is the weak transition from JHS to SHS. The gender ratio is much lower in rural areas (51.6%) than in urban areas (73.3%) and is only 28.8% in the bottom welfare quintile whilst reaching 82.4% in the top quintile. So, girls who live in rural areas, and girls who live in households with lower levels of welfare tend to be especially disadvantaged in comparison to boys under the same conditions; (b) Notably, in these cases, the source of the gender gap is not, as at national level, due to transition failure between JHS and SHS, but more due to initial factors such as the fact that some girls never start school, or that they do not complete their primary education (Nguyen and Wodon, forthcoming); (c) About 80% of all university entrants originate from only 20% of the secondary schools. Most have attended fee paying high cost private schools. 10% of the secondary schools produce nearly 80% of all science and engineering undergraduates. Less than 3% of those qualified for degree programmes originate from the lowest scoring 40% of all secondary schools;
- On average as many as 40% of children may not be present at school on a given day;
- Absence from school is highest amongst children from low income households and achievement is relatively low which leads to age in grade slippage (thus more over-age children are poor children);
- Learning outcomes are poor (see BECE graph on page 12), especially for girls; though at least in primary schools, Joseph and Wodon (2012b) find test scores have risen steadily between 2005 and 2009 – though with rural students lagging well behind⁶.
- Teacher absenteeism is high (averaging at 27% annually).

⁴ Drop-out is associated with poor attendance and performance, caregiver illiteracy, low income and high schooling costs, household composition and children's work. It is associated with complex patterns of temporary periodic absence as well as permanent cessation of schooling (Ananga, 2011).

⁵ No explanation is offered for this, but given correlations with drop out and welfare it is possibly because of the smaller pool of girls there, who by definition are likely to be better off and less likely to drop out.

⁶ This paper on primary school learning outcomes offers some useful regression analysis results and discussion comparing boys and girls' results in English and Maths.



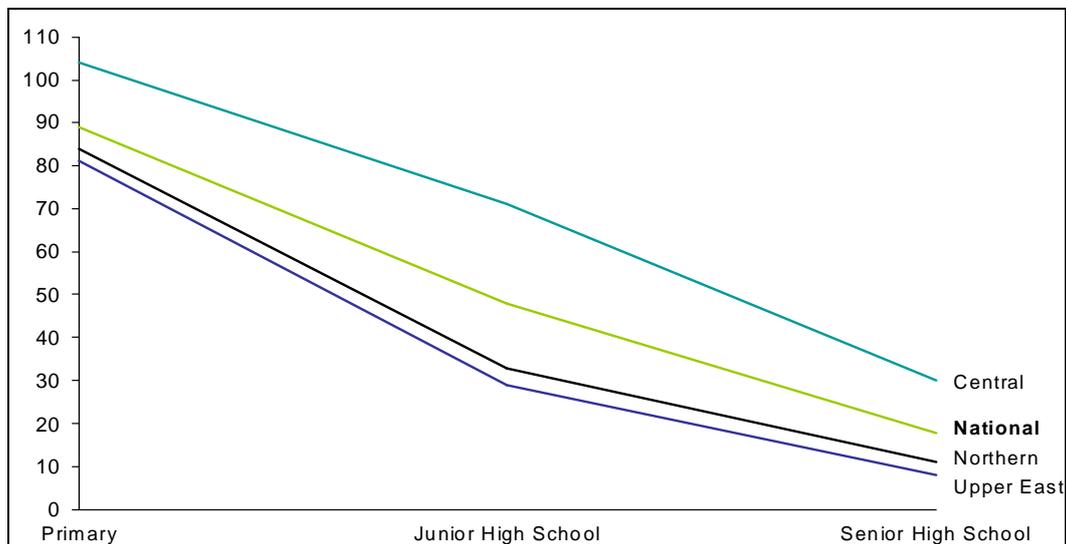
Regional differences

One of the main inequalities in education is between – and even within – regions. Ghana’s Northern Region (NR) is where girls are least likely to go to school, stay in school, learn efficiently and transition to JHS and SHS. The following figures illustrate this situation, and re-emphasise the interaction between gender, poverty and location:

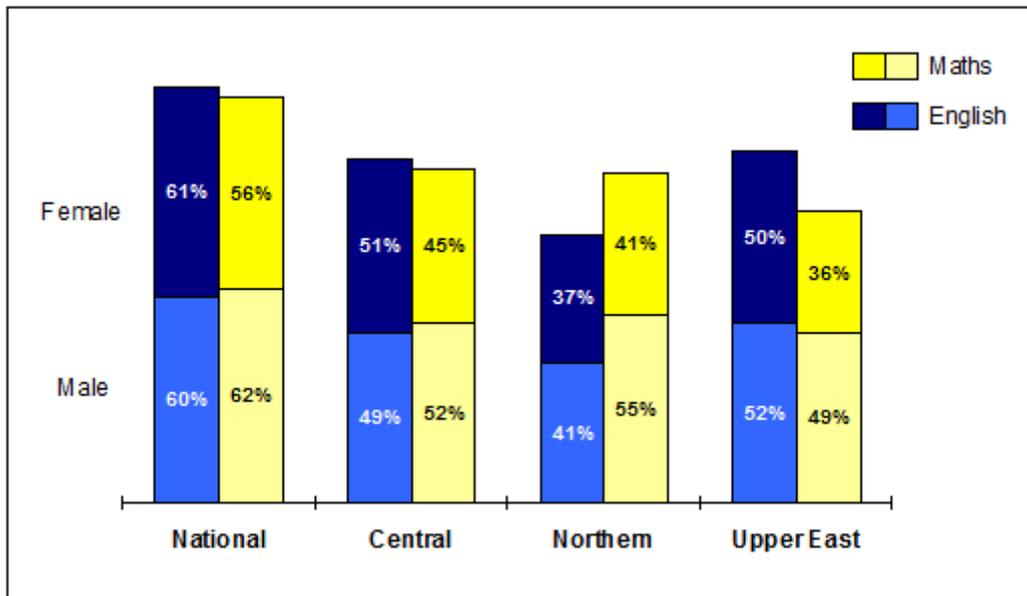
- In the NR, poverty sits between 52% and 88% compared to 12-31% in the south (Ghana Statistical Service, 2008a);
- In the NR, over 65% of girls over the age of 15 have received no formal education compared with a national average of 21% (Ghana Statistical Service, 2008b);
- Only 30% of women aged 15-24 are literate in the NR - the number doubles for the Central Region (CR) (65%) (Ghana Statistical Service, 2007);
- Only 31% of population is able to access improved sanitation in the NR, half that of the Central region (64%) (ibid.);
- Only 60% of children of primary school age attend school compared with 88% in the CR and the percentage drops at secondary level, with only 25% of children enrolled in the NR vs. 52% in the CR (ibid.);
- Almost half of children in the NR are involved in child labour (45%), while a quarter (26%) in the CR (ibid.);
- The proportion of the population that has never attended school in the age-group 6-14 years ranges from an average of 5% in the Greater Accra region to an average of 43% in the NR (Create, 2007).

The two following graphs highlight the crucial interaction between gender, poverty and location:

Ghana Net Enrolment Ratio by region (Ghana EMIS, 2008)



Basic Education Certificate Examination (BECE) Pass Rates M/F by region (Ghana EMIS, 2008)



The MOE's (2011a) report on underperforming schools underlines this issue of regional difference in achievement and interaction with gender. It notes the concerning aspect of gender disparity in learning outcomes (based on national pass rates) with 'the high levels [of failure and low scores] observed in the more economically marginalised regions [of Ghana]' (i.e. highest gender difference of 14 percentage points in Upper West whilst only 2 percentage points in Greater Accra).

Section 3: The Policy and Legal Environment

When assessing a strategy's impact it is crucial to have a broad picture of the wider economic and political context in which those strategies will operate. For example, particularly supportive/unsupportive national/local political conditions strongly influence the potential of all strategies' impact, and some more than others. Therefore, this section briefly explores the major policy decisions and programmes that may have affected enrolment, transition, completion, achievement, especially in terms of gender. It also explores any current policy issues (including non-educational) that may have a bearing on girls' education.

Major recent government interventions/policy

FCUBE: The 1992 Constitution of the Republic of Ghana (Article 25) guarantees the right of *All Persons to equal educational opportunities and facilities and with a view to achieving the full realisation of that right*. Free primary education was introduced in Ghana in 1995 under the Free Compulsory Universal Basic Education (FCUBE) programme. Despite the initiative, Lewin (2011) notes that nationwide 'about 40% of six year olds are not in school. This falls to about 10% by age 11. Above this age those who have not enrolled are unlikely to ever enrol'.

Education Strategic Plans (ESPs): The Government of Ghana's education strategy was outlined in the ESP 2003-15, and more recently the ESP 2010-20⁷. The 2003-2015 ESP focused on four key areas: equitable access; quality of education; education management and; science and technology education and training. The 2004 White Paper on Education Reforms aimed to build upon the ESP commitments, to ensure that high quality free basic education is provided to all children and '*that secondary education is more inclusive and appropriate to the needs of young people and the demands of the Ghanaian economy*'. The reforms included: 1) expansion of basic education to two years of pre-school, six years of primary education and three years of JHS (all to be compulsory and fee-free); 2) reduced primary curriculum; 3) a more general comprehensive curriculum; 4) SHS to become four years with specialist streams. The 2010-20 ESP particularly addresses issues of quality, equity (especially gender), and represents a shift to a more holistic development of all sectors of the education sector, rather than just basic education. It also prioritises Information Communications Technology (ICT), Science, Maths and Technology (SMT) and strengthening monitoring and accountability in the sector as a whole.

Fast Track Initiative: Ghana's proposal to the FTI, which put a major focus on promoting girls' education, was endorsed in 2003-2004. In November 2004, the FTI Catalytic Fund (CF) allocated USD 8m to Ghana to support (i) supplying of basic school text books; (ii) a teacher initiative scheme; and (iii) monitoring and supervision. This initial tranche was followed by others and by November 2007, a total of USD 19m had been disbursed. The FTI evaluation (Allsop et al, 2010) concludes that 'all the evidence that has been taken into account shows clearly that MOE/GOG is firmly driving forward the policies and planning relating to EFA'.

⁷ These build on the Growth Poverty Reduction Strategy (I and II) which followed the application to the Enhanced Highly Indebted Poor Country facility in 2001.

Capitation grants: After a successful pilot in 2004, the government introduced a Capitation Grant system. Every school receives funding per pupil (in 2008/9 this was increased from GHC3 to GHC4.5 per pupil per term). Schools are no longer allowed to ask parents for fees. As Lewin (2011) notes, fee free schooling linked to capitation payments to schools had an impact on enrolments in 2005 which is being sustained. However, crucially for girls, attrition rates do not seem to have been affected. There is also a question over the way in which the current flat rate subsidies may fail to benefit poorer areas and households, especially at SHS levels. This is particularly pertinent in relation to girls, given the demonstrated interplay between gender, poverty, physical location and their effect on educational outcomes. Lewin (2011) suggests that in order for capitation grants to benefit the poorest children, fees should continue to be charged to children from richer households in these schools and the income used to improve quality.

Decentralisation: This is a key policy in the drive for education for all in Ghana. The approach has been intended to 'improve operational efficiency and promote a more responsive approach to education service delivery at the district, community and school level' (Create, 2008). The Ghana literature suggests that overall decentralisation has provided a good framework for improving educational performance. However, some analysts highlight evidence which suggests that it may cause further disparities in provision, especially between rural and urban areas (see, for example, Akyeampong et al, 2007). The new ESP continues Ghana's focus on decentralisation and should provide good entry points for contextualised girls' education strategies by targeting problems which vary by and within regions. Decentralisation also provides an effective framework for the positioning of girls' education officers, which again, if well-used, can be a mechanism for boosting girls' enrolment and academic success (e.g. Aikman and Unterhalter, 2005).

Other initiatives: Between 2003 and 2010 Ghana adopted a number of additional initiatives:

- A major nutrition and school feeding programme targeted at schools with high levels of poverty in their catchment areas and enrolment problems;
- Free school uniforms and free textbooks programmes. Conceived as a pro-poor intervention, attempting to target the poorest families. A 2011 MOE evaluation is unable to comment on the efficacy of these two elements as they are so recent;
- The National Health Insurance scheme to provide equitable health insurance for all;
- LEAP (Livelihood Empowerment Against Poverty) – cash transfers to vulnerable households.

Policy and legal issues affecting girls' education

Teachers: Key to quality education is teacher recruitment, training, placement and attendance. Approximately 25% of the budget of GOG is spent on remuneration of teachers. However, teacher absenteeism is a pressing concern: (i) basic education teacher absenteeism is at 27%; and (ii) from a school year of 197 days, the average number of days worked is 80 (Allsop et al, 2010). In this context, any strategies for girls' education will have limited impact.

Budgets: The international literature suggests that high level political commitment, reflected in budgets, is vital to success in girls' education (e.g. Bruns, Mingat and Rakotomalala, 2003). A related structural/organisational point is that the GEU sits within the Basic Education section of the Ministry. This may be relevant as the ESP shifts its focus

beyond the basic cycle of education - but with a continued focus on girls (especially with evidence showing the interconnectedness between the basic and secondary cycles in terms of girls' improved educational outcomes). In light of the international evidence, such ESP commitments can be effective if there are modalities and mechanisms that ring-fence separate allocations within the government's education budget to the GEU. On a separate note, the 2010 FTI evaluation (Allsop et al) notes that non salary expenditure as a share of total resource envelope continues to decrease, claiming this is 'likely to undermine the ability of the sector to effectively implement the ESP', including, by definition, progress towards quality girls' education.

Livelihoods/careers and wider policies concerning gender: As outlined above, the current ESP and education strategy reforms do pay attention to the importance of linking learning to livelihoods and careers. However, 2009 research claims that in Ghana, 'international donors...tend to have placed major emphasis on literacy and qualifications without examining their relevance in the context of access to usable skills and other resources'. The same study also notes a lack of consultation with grassroots and youth organisations in education reform, and a general lack of attention to the impact on livelihoods. International research also shows that the success of girls' education strategies is contingent on gender sensitive policies outside the education sector, e.g. fair and attractive working conditions for women. High level political commitment (reflected in resources) to wider gender issues is essential (Aikman and Unterhalter, 2005). Ghana has ratified both the main international and regional instruments protecting women's rights (Convention on the Elimination of All Forms of Discrimination against Women and the Maputo Protocol).

According to Women in Law and Development in Africa (WILDAF, 2011) although existing legislation provides for equal rights to employment, women continue to experience discrimination. WILDAF notes: in 2007 an estimated 86% of working women were employed in the informal sector; only 4% of working women were employed in the formal public sector and only 6% in the formal private sector; women encounter resistance in entering non-traditional fields; despite the white paper on affirmative action on women's representation in public life, women continue to be significantly under-represented in decision making positions.

Corporal punishment: There is consensus in the international and Ghana-based literature (e.g. Ampiah and Adu-Yeboah, 2009 on Ghana; Lewin, 2011; Antonowicz, 2010) that corporal punishment is a 'push' factor for girls' drop out. Despite this, corporal punishment is lawful in schools (though restricted, according to the Ghana Education Service (GES) Policy and the teachers' handbook issued by the Ministry of Education⁸). As of July 2005, there were no mechanisms in place for monitoring corporal punishment in schools, and while in 2006 legislation was proposed to prohibit corporal punishment, this amendment did not go through.

Child labour: Child labour is closely associated with drop out (temporary and permanent – see Create, 2007), and girls are most prone to drop out. Ghana's Labour Decree (1967) prohibits employment of children under the age of 15, although the law permits

⁸ The handbook states the head teacher is the only person allowed to administer corporal punishment and each incident is expected to be recorded for monitoring. The teachers' handbook also states that corporal punishment should be used as a last resort (Camfed, 2010).

undefined 'light' work by children. An ILO/IPEC Ghana Statistical Service survey of child labour released in 2003 found that 2.47 million children were engaged in economic activity, and 64.3% of those children attended school. Of those children engaged in economic activity, 1.27 million children were found to be engaged in child labour as defined by age and hazard. Child labour in Ghana is gendered, inextricably linked to poverty, and varies by region (Create, 2007; Camfed, 2010). Complementary education (discussed under strategy 10) may be a relevant strategy for addressing the issue of child labour.

Donor partner harmonisation: The recent FTI evaluation (Allsop et al, 2010) suggests that the donor/development partner environment in the education sector in Ghana is individualistic, and not necessarily in line with Paris Declaration ideals. Clearly, education strategies will maximise their impact if they are part of a coordinated rather than competitive whole, working towards shared goals.

Other issues: Lewin (2011) points to some key policy messages from the Create project's comprehensive research. These are also reflected in the new ESP. In brief, these include:

- the need for managed expansion of the secondary sector;
- the need for a focus on 'the margins' – in terms of geographic and social locations;
- a focus on over-age enrolment;
- the need for better monitoring systems (for pupils and teachers).

Section 4: Major Strategies for Girls' Education: reviewing the evidence

Introduction

In this section we outline and review the various strategies that have been used to tackle the problems concerning girls' education described in the previous sections, which are categorised under 11 separate strategies. The international and Ghana-specific literature (research and programmatic evaluations) is reviewed with a view to drawing out and analysing the efficacy of these strategies in terms of the following:

- their apparent impact on enrolment, transition (especially from primary to JHS, and to SHS) and retention;
- their apparent impact on learning or life skills outcomes;
- their sustainability in terms of post programmatic impact.

In addition, the issue of regional focus, especially related to need, (as explored in the previous sections of this report) and any policy or other opportunities or impediments related to the strategy are explored. The strategy analysis particularly considers the rigour of the evidence base in its assessment of what we can learn from it.

In assessing the evidence base, a number of terms are used in the following way:

- *Critical*: in the academic sense (research that questions assumptions);
- *Independent*: research conducted by external party/ies;
- *Rigorous*: research offering a robust, adequately defended methodology, usually with a reasonable sample size and using triangulation (though small scale with depth also prioritised).

1. Scholarship/stipends:

Cash and in-kind contributions to girls and/or families for the purpose of school attendance. This includes scholarships, conditional cash transfers and in-kind contributions, such as for uniforms or textbooks.

A frequently used strategy internationally, there is a reasonable amount of high quality research which shows a positive impact on girls' education, at least in terms of enrolment and retention. This includes Randomised Control Trials (RCT) and independent peer reviewed contributions, as well as a number of internal programme evaluations.

- Strong evidence shows it to be more effective for girls than boys and more effective at secondary school level. For example, a host of independent and internal studies corroborate the positive impact of Bangladesh's Female Stipend Programme (FSP) which saw girls' enrolment rise to around double the national average (e.g. Ahmed and Ahmed, 2002; Chowdhury, Choudhury and Nath, 1999; Khandker, Pitt and Fuwa, 2003). As of 2003, the programme was nationwide and 55–60 % of girls and boys were enrolled in secondary school (Khandkher, Pitt and Fuwa, 2003). Rigorous research on the Columbia Voucher Scheme indicates a 25% increase in secondary school completion (Patrinos, 2007). Other documented international impact includes: King and Bellew (1991), showing girls 30% more likely to enrol on the basis of free textbooks at primary school in Peru); Chaudhury and Parajuli (2006) on a Pakistan stipend

programme which showed female enrolment increasing by 9% over two years in stipend-eligible middle schools (grades 6–8). Only one study found no gender difference: an NGO in rural Kenya that awarded free uniforms to both boys and girls saw a 44% reduction in absenteeism but no significant difference between boys and girls in the effects (Evans, Kremer and Ngatia, 2009).

- This strategy has a positive effect on retention. Independent research on Brazil's Bolsa Escola stipend programme shows that it virtually eliminated dropouts (Lavinias, 2001; Morley and Coady, 2003). Schultz (2003), in a randomised trial evaluation of the Mexican Progressa scholarship programme (issued with conditions – see below) showed girls' enrolments improved, especially for children finishing primary school and entering secondary school. The most significant increase (15%) was for girls completing grade six. An RCT on a Kenyan programme providing free uniforms, textbooks and, notably, in tandem with classroom construction, showed increased years of schooling attained by 15% (Kremer, Moulin and Namunyu, 2002).
- Also, in some cases, this strategy has been proven in terms of achievement. Patrinos (2007) explores this in detail at the international level. He highlights a randomised evaluation which found that voucher lottery winners were 15–20 % more likely to attend private school, 10% more likely to complete eighth grade, and scored the equivalent of a full grade level higher (0.2 standard deviations) on standardised tests compared to students in the control group. He also notes: 'The costs of the programme were similar to the costs of providing places in public schools.' However, Patrinos also notes that on the Bangladesh FSP, of those female scholarship recipients that took the secondary school certificate exam, only 54 % received a passing 9th grade, similar to the national pass rate (Patrinos, 2007). More encouragingly, a peer reviewed study of a small, randomised evaluation of a girls' scholarship programme at primary level⁹ showed eligible girls had significantly higher test scores and school attendance rates. Test-score improvements persisted even when the girls were no longer eligible to compete for the scholarships. Schools where girls were eligible for the scholarships saw significant increases in teacher attendance (Kremer, Miguel and Thornton, 2009).
- In Malawi, a cash transfer experiment targeted at adolescent girls has explored the difference between conditional (CCT) and unconditional (UCT) cash transfers on girls' schooling and non-schooling outcomes (Baird, McIntosh and Özler, 2010). School enrolment improved in both groups, though significantly more in the CCT arm which also saw a significant gain in learning. The condition on schooling proved costly in terms of non-schooling outcomes, however, with rates of pregnancy and early marriage being substantially higher in the CCT compared with the UCT arm. The findings suggest that a CCT approach for early adolescents that transitions to a UCT for older teenagers, would improve schooling outcomes while avoiding the potential adverse impacts of conditionality on early marriage and pregnancy.
- Some evidence is appearing on the positive impact of scholarships on girls' empowerment. Lloyd (forthcoming, citing Friedman et al, 2001) points to evidence from a five-year longitudinal follow-up of a randomised girls' merit scholarship programme in Western Kenya resulting in improved test scores and increases in

⁹ This programme provided two-year merit-based scholarships to girls in two districts in western Kenya on the basis of standardised test scores.

secondary enrolment among girls attending schools in the intervention¹⁰. Crucially, in terms of 'beyond access' issues, 'five years on, young women attending schools that had participated in the merit scholarship programme had fewer arranged marriages and were less likely to accept domestic violence as legitimate than young women who had attended schools that had not participated in the programme'.

Caveats

- International evidence suggests that this strategy may work best when conditions are attached – e.g. independent and internal research on the Bangladesh FSP in which girls had to (1) attend school regularly, (2) achieve certain minimum grades, and (3) not marry while in school; independent research in Cote D'Ivoire (de Brauw and Hoddinott, 2008); and by Schultz (2003) on Mexico (in this case the scholarship was conditional on 85% attendance and was combined with free healthcare sessions). However, the issue of conditionality needs to be considered through the lens of ensuring that scholarships/stipends are targeted to those who most need them. The World Bank study on cash transfers in Malawi (Baird, McIntosh and Özler, 2010) underlines the need for a careful approach to conditionality in order not to undermine social protection.
- Independent, peer reviewed research on the Ambassadors Scholarship programme in Djibouti and Sierra Leone indicates that tensions can be caused over selection, something which must be taken into consideration when planning criteria (Chapman and Mushlin, 2008), as does an evaluation of UNICEF's Childscope (CS) project in Ghana (Chapman, Emert and Osei, 2003). Such evidence highlights the importance of seeing this strategy (and others, as we will see later) as a *process*, and not an 'input'.
- Critical research shows that access, retention and transition improved by scholarships do not necessarily mean increased empowerment/gender equity. For example, studies on the FSP (e.g. Abadzi/World Bank, 2003, and Mahmud, 2003), acknowledge the considerable move towards gender parity of enrolment as well as high levels of community support for the programme, but raise concerns about education quality, equality and sustainability of the intervention. Peer reviewed research suggests that girls who attended secondary madrasas under the FSP had a more conservative outlook (e.g. on family planning and gender roles) than girls attending secular secondary schools (Asadullah and Chaudhury, 2006)¹¹.
- Important questions remain in terms of this strategy's impact on the poorest and hardest to reach. Research suggests that selection for scholarship recipients clearly needs to be done by gender and wealth quintiles, and terms of 'conditionality' must take this into account if the most marginalised girls are to be reached. Independent peer reviewed research (Chapman and Mushlin, 2008) on the (non merit-based) Ambassador's Scholarship programme in Djibouti and Sierra Leone indicates that some scholarship recipients might have continued in secondary school even without the scholarships. Lloyd (forthcoming) notes programmes may favour those who are already advantaged in terms of parental background, suggesting alternative approaches to rewarding learning, e.g. targeting disadvantaged settings, incentivising

¹⁰ It is not clear from Lloyd (forthcoming) if this is an evaluation of the same programme as that considered by Kremer et al's work.

¹¹ The FSP took place in combination with the Islamisation of the education system and the percentage of female students enrolled in madrasas rose from 5% in 1980 to 30% in 1995 to nearly 50% in 2009 (Lloyd, 2009).

students and/or teachers according to performance and gains (rather than absolute) in test scores.

Ghana-based evidence

In terms of scholarship programmes, there have been a number specifically for girls which have operated in Ghana. For the most part, these programmes have been components of wider interventions. It is, therefore, hard to attribute impact to the scholarship/stipend element of the programme. The following section looks at these on a 'by project' basis.

- The Childscope (CS) project has had some success; an evaluation (Chapman, Emert and Osei, 2003) looked at its impact which can be summarised as follows:
 - Overall increase in girls' primary school enrolment in programme areas over those nationally was 0.6% (1.1% compared to 1.7%);
 - Difference in enrolment rates boys to girls in programme primary schools was narrowed to 14.2% from 18.4%;
 - The same pattern was seen at JHS level, though initial disparities were greater and the reduction in the disparity was smaller. Overall, the difference in enrolment rates for boys and girls decreased by 2.2%. From a 1999/00 gap of 31.6%, it dropped to a 29.4% gap in 2001/02;
 - Retention among boys and girls actually declined in programme schools though in CS schools drop-out among girls was at a lower rate (though drop-out exceeded gains in enrolment);
 - Transition from P6 to JHS actually declined – though this data varied significantly by district;
 - Based on cohort examination¹², results indicate that, at the primary level, survival rates improved for girls in CS districts at the same time they have declined for boys. The same pattern occurs at the junior secondary level, but to a smaller extent.
 - Achievement scores (BECE) in most CS districts improved between 1998 and 2001 but did not keep up with national gains (data was not available by gender). Disparities in achievement between CS districts and others increased.

The evaluation offers some useful additional analysis:

- The project did not appear to be sustainable. That is, not just the scholarship element, but as a whole and especially the community participation interventions¹³;
- The gains must be seen in the context of the programmes target areas, which were by definition the most challenging in terms of making an impact;
- The strategies themselves were not necessarily ineffective, and the issue of the effectiveness of systems for delivery is an important consideration;
- Significant community concerns were raised in relation to the scholarship scheme, with communities insisting boys be included as well (this reiterates the point emerging from the international literature on the vital importance of 'process' in the delivery of bursaries).

¹² The cohort survival rate of boys and girls is another way the report assesses the impact on retention. Based on an assumption that 1,000 boys and 1,000 girls were to start P1, this data reports how many would be expected to complete P6 six years later. This is an attempt to look at the issue in a more longitudinal way, and offers a hopeful picture.

¹³ There will be a longer discussion relating to the sustainability of community participation interventions and CS under strategy 3.

- *Integrated Social Development Centre (ISODEC)*: According to its 2005 report, ISODEC has spent USD453, 565 on both project activities and administrative costs at the rate of USD150,000 per annum. It notes that a total number of 1,173 girls have benefited from scholarships in the five districts in Ashanti and Brong Ahafo. Tapa Secondary School has 10 scholarship recipients enrolled, and the report outlines additional activities in this particular school, such as remedial classes in Mathematics, English and Integrated Science for beneficiaries and a staff member to monitor girls' progress. According to one head teacher's comments cited in the report, there have been some improvements on girls' enrolment, confidence and achievement. Quantitative evidence on achievement suggests no sustained positive impact, however, with male and female BECE pass rates in evaluation schools fluctuating considerably year to year.
- *Camfed*: Scholarships are a core part of its programme, which incorporates a holistic approach to tackling obstacles to girls' enrolment, progression and achievement. As with CS, it is not possible to disaggregate the impact of the scholarship dimension of the programme from others. However, it is worth noting some impact from their extensive baseline exercise and some evaluation reports for donors. Impact on enrolment, retention and transition looks promising – e.g., in the two districts sampled between 2007 and 2009, enrolment has increased by 17%; completion rates have increased by 18% and progression into the next grade has increased by 22%. The baseline study shows that in schools where Camfed's programme is well-established, enrolment in the last two years of primary school increased by 19% between 2007 and 2009 – the same as the district-wide enrolment. Enrolment in schools which are new to the programme increased by 5%; lower than the district increase which was 15%, though the report highlights that Camfed is intentionally focusing on schools that lag behind the district norm.
- Joseph and Wodon's 2012 study (2012b) provides some evidence on a broader take of this strategy – provision of textbooks not to individual girls but to the school as a whole. Their preliminary findings (on primary schools only) - show that the availability of textbooks does not seem to make a difference for English test scores, but it does for mathematics (though not a large effect). There is no significant difference between boys and girls. However, it is worth noting that this study is only at primary level, where the gender gap in learning is extremely small, with girls doing slightly better in English, and boys in Maths.
- The companion study on enrolment, drop out and repetition in relation to the same variables (at JHS as well as primary) notes that at primary school, availability of extra maths textbooks increases first grade enrolment and reduces drop out, but only at a marginally significant level (10%); and an increase in overall enrolment associated with more textbooks for English. At JHS, their findings are somewhat surprising in that changes in availability of textbooks in English show a negative correlation with changes in enrolment. Accompanying qualitative research which looks at how teachers and pupils (by gender) use textbooks (by subject) in practice might be a valuable to help understand the reality and implications of resource constraints and their impacts on learning. In their paper on learning outcomes, the authors also include data on parental perceptions of schools, and note that in districts where these perceptions relate to complaints concerning a lack of textbooks, these are associated with higher test scores. The authors conjecture that this may be because parents with such complaints may be those who are more likely to be active in supervising their

children's studies, and are therefore aware of and concerned about the lack of a textbook (Joseph and Wodon, 2012b).

- Also of relevance here is Joseph and Wodon's discussion on the varying impact/influence on learning outcomes (limited to primary level in this case) of socio-economic factors (including adult illiteracy, poverty and child malnutrition) and school inputs (including textbook availability, school management, teachers and facilities). Their forthcoming paper (2012b) argues that both have a significant impact on learning outcomes, but that socio-economic factors are more influential¹⁴. Such evidence can build a case for focusing more on household/community level CCTs/UCTs in deprived areas.

Conclusions

This is an effective strategy with demonstrated positive impact on all educational outcomes for girls. This evidence is predominantly international, with a significant amount from Africa, some from countries with similar issues faced by Ghana. Overall, evidence suggests scholarships/stipends etc are best used in conjunction with careful selection criteria (wealth and gender, and with community consultation), conditions (attached to attendance etc), and in combination with other strategies, especially ones that may target gender equity in the classroom and beyond. Scholarships linked to attendance/achievement/learning outcomes based on a variety of student and teacher incentives provide scope for exploration in Ghana given the particular issues with low achievement. However, as mentioned, this should be carefully managed to ensure achievement indicators are 'relative' so as not to exclude those who are most disadvantaged. Some evidence is emerging that scholarships, through their success in access, retention and transition (i.e. because it means girls are in school longer), and *in tandem with gender equity strategies* (i.e. as long as school is proactively gender sensitive) can 'empower' girls. With its focus on secondary level, the literature suggests this is probably a very cost effective strategy as the economic returns to secondary school are substantially greater for women than men (e.g. Tembon and Fort, eds., 2008).

2. Transportation/boarding:

Interventions to reduce or eliminate the costs for girls travelling to/from school and to ensure their safety.

International evidence (evidence reviewed looks solely at 'building schools' element of this strategy)

- Evidence shows a clear positive impact on enrolment. Rugh (2000) highlights the case of Egypt: constructing new schools in rural areas during the 1980s boosted girls' enrolments by 60%, and boys' by 19%. It is unclear if this is at primary or secondary level. In an independent study, Sipahimanlani (1999) showed that a girl's probability of ever enrolling in school drops by 1–2 percentage points if the distance to primary school increases marginally. Filmer's (1999, World Bank commissioned) cross-country study found that school-aged children are 10–20 percentage points more likely to attend school if they live in a village with a primary school, and notes a larger effect on girls than boys. A (2009) robust randomised evaluation (based on 31 villages and 1,500

¹⁴ This echoes work in high income countries (UK and USA) - Kramarz, Machin and Ouazad, 2009 - and some transition/developing countries such as; Glewwe, Kremer and Moulin, 2009 (Kenya); Hernandez-Zavala et al, 2006 (Latin America).

children) of the effects of the establishment of village-based schools in Afghanistan (note the conservative cultural context) found dramatic improvements in enrolment and test scores, particularly for girls. By reducing the distance to the closest primary school for children, girls' enrolment increased by 19 percentage points per mile, compared to 13 for boys (Burde and Linden, 2009). The data shows that when there is a school in the village, the gender gap in enrolment is 4 percentage points compared to 21 percentage points in control villages. A Chad-based study (Lehman, 2003), in 179 villages found: 80% of enrolled children came from the 8% of villages that had schools located in them; when the distance to school was greater than one kilometre, enrolment was less than half what it was when the school was in the village; and drop-off in enrolment was more distance-sensitive for girls than for boys. The study takes an interesting angle on synergy with quality, referring to three kinds of 'distance' which affect access: physical distance (in kilometres); time distance, (e.g. obstacles like mountains and rivers and how they impact travel time); and cultural distance, "the drop-off" as children leave their own community to go to a community that may be considered foreign or unfriendly' (Lehman, 2003). The latter will be discussed under strategy 10.

- Some evidence shows impact on achievement. The Afghanistan study outlined above found that test scores in maths and language (Dari) improve by 0.59 standard deviations ($p=0.01$) from before the intervention to one year after children have been enrolled. Test scores fall by 0.19 standard deviations for every mile the child must travel to school. Having to travel less than one mile to school has an effect on test scores similar to that of many successful classroom-based interventions.
- In a study pertinent to over-age enrolment, Bommier and Lambert's (2000) found that, in Tanzania, living a distance of one kilometre from the school is associated with starting school on average one quarter of a year older than those children who live less than one kilometre from the school.

Caveats/synergies

- The kind of school built (community/government; single sex/coeducational etc.), and who staffs it is critical to the impact of this strategy—perhaps less so to enrolment than retention and progression. The studies detailed above do not control for 'type of school', though interestingly some research indicates a particular synergy with community schools and female teachers. Alderman and King's (1998) peer reviewed article comments on a formal evaluation of a set of programmes in Balochistan, Pakistan, which increased access to girls' schools with female teachers¹⁵ and saw an increase in girls' enrolment by nearly a third. They note the importance of the above synergies, remarking that staffed by local teachers, 'the community schools may be considered a shift in the supply of appropriate schools'¹⁶.
- There are questions about the role of the interaction between distance to school and the quality of learning in affecting access. For example, in the Afghan study, would the children remain motivated to stay at school if they did not perform better at the

¹⁵ Where there were not enough qualified female teachers, the school was given the option of hiring a male teacher, under community control.

¹⁶ Community schools/complementary education initiatives are discussed further under strategy 10.

community-based schools? Filmer (2007) argues that this interaction is important but under-studied. This will be discussed more under strategy 10.

Ghana-based evidence

- The World Bank's Basic Education Support programme in Ghana focussed almost exclusively on infrastructure. Its (2004) internal evaluation of the programme claims responsibility for nationwide improvements in enrolment, retention and transition, linked to this spending on infrastructure. It is likely that this investment was a considerable part of these improvements, however the evaluation does not offer evidence in this respect, and cannot show that school building alone creates this impact (and in fact, many of the indicators have actually declined since then). The evaluation makes reference to important synergies, acknowledging that this work was done 'in the context of a functioning education system in which government ensures a supply of trained teachers' and acknowledging the work of other donors' (including DFID) attention to educational 'software'.
- The CS project (detailed under strategy 1) provides some evidence on the prong of the programme which provided 2,500 bicycles to girls to enable them to get to school more easily. The report notes that this strategy was particularly remarked upon by teachers as improving girls' attendance at school. One bicycle was often used by two girls, suggesting that this strategy was working at a cheaper cost than budgeted for (though the issue of a bicycle-sharing arrangement would need to be explored further). The report does not give information on how recipient girls were chosen nor that there were no issues with theft or appropriation. The UNICEF Bicycle Programme evaluation (Boakye and Osei, 2004) shows positive impact on enrolment (a 1.02% improvement in enrolment rates in the Afram Plains, 7.6% enrolment improvement in Tolon-Kumbungu, 7.1% in Savelugu-Nanton); and attendance (95% of the girls attended school more regularly compared to when they had not had the bicycles, and higher attendance rates directly related to longer years of bicycle usage). The report shows that 70% of those who received bicycles demonstrated higher academic performance (based on class position before and after bicycle was allocated). There is no quantitative evidence to show improved retention, though the qualitative evidence from interviews with staff does make this link. Challenges noted in the evaluation include bike repair problems and disputed ownership, or lending to others for non-school use.

Conclusions

The evidence suggests that this is a solid 'access' strategy, to which girls' enrolments respond especially positively. The evidence is mainly from primary rather than secondary schools. However, it is probably safe to say that the primary level evidence is positive and conclusive enough that this strategy ought to be successful at secondary level, and perhaps more so, given the greater distance to secondary schools, especially in rural Ghana and the associated concern with safety on the journey to school for girls. There is a small amount (though what exists is high in quality) of evidence which shows some positive impact on achievement. However, as always, there is of course an important and demonstrated caveat concerning quality of schools, and in this case, type of schools. The positive evidence from Ghana on the provision of bikes suggests there may be merit in exploring and evaluating this strategy more fully. An alternative to this strategy is that of boarding schools, especially relevant for girls at secondary schools where distances are often further. Ad hoc arrangements where girls stay with relatives or friends or in rented

accommodation in order to attend school appear to make girls vulnerable to abuse suggesting that official boarding facilities may be better, though boarding schools, like day schools, are not necessarily safe environments.

3. Community engagement/sensitisation:

Activities by/for the community for and about girls' education, promoting positive attitudes and local resource mobilisation to support girls in obtaining an education.

This is a broad strategy which encompasses a wide number of activities. In general, the literature on this strategy is not very robust. As previously stressed, this does not mean that the strategy is ineffective; rather that more research needs to be done and programme monitoring and evaluation of activities within this strategy needs to be more impact focused. As this strategy is used as an ongoing 'background' to other more concrete (quite literally, such as school construction) interventions, its impact cannot be disaggregated from these. This suggests that this strategy is not meaningful unless positioned in relation to an intervention(s) that brings external resources to help tackle girls' education. As such, in action it is a critical 'wrap-around' approach.

The literature suggests typical activities including:

- Sensitisation workshops with parents and community leaders that stress issues of gender equity and child protection;
- Advocacy (in the form of workshops or training) with traditional authorities to achieve change in traditional modes of thought and adaptation of customs;
- Assisting communities to develop and sustain community/school action plans, including their involvement in resourcing their local schools (with money, labour or other in kind contributions).

Ghana-based evidence

A number of projects and programmes in Ghana have used this strategy, and these highlight the problems of distilling the direct evidence of its impact:

- One example of some impact is that of CS, as discussed under strategy 1. Community activities were integral to the CS project. The evaluation states, 'community participation strategies, pursued over a sustained amount of time, can raise girls' participation, but that gains are small. Moreover, the gains are more likely to be seen in initial enrolment, but less likely to be seen in retention in the primary grades, achievement, or continuation to junior secondary grades'. The evaluation also notes: 'small gains come at a high cost, both in the intensity of interventions that were needed to achieve the gains and the length of time that was needed to achieve them'.
- The 2004 internally-led evaluation of the United States Agency of International Development (USAID) Strategies for Advancing Girls' Education (SAGE) programme highlights the problematic nature of measuring impact due to increased awareness (Ofori-Bah, Kudzi and Donney). It notes: 'indeed, the measure for enrolment...is influenced by various demographic indices, thus, the enrolment numbers might not necessarily increase even when intermediate results such as increased awareness about girls' education are achieved'. However, the evaluation attributes 'people level' results to the strategy – e.g. reduction in the incidence of teenage pregnancy and the

provision of girls' school needs (based on two interviews for the former and a record of inputs to the latter).

- The internal USAID Quality in Primary Schools Project (QUIPS) programme evaluation claims that 'community practices related to "supporting girls' education" demonstrated a marked change from baseline to the end of the period, with support for girls' education observed at the highest level in a noticeable number of communities' (TMG/EARC, 2005). The programme was, however, one of a number of wide ranging interventions operating at the time, and no direct evidence is provided.
- Sustainability is not guaranteed by community participation. The SAGE final evaluation notes that 'Community Action Plans were not being updated since the end of SAGE, nor was there indication that they would update them' (Ofori-Bah, Kudzi and Donney, 2004). The CS evaluation notes that many observers question the sustainability of school feeding programmes but argues that it is not clear that the CS community participation strategy is any more sustainable. As the evaluation notes, strategies (including school feeding and scholarships), often use a community participation approach in the 'wrap around' way we refer to above.
- Camfed notes anecdotal evidence that in the case of scholarships, community ownership has been vital to success, and that this success is founded on the 'process' of this community engagement (there has not been the backlash to targeting girls as noted in some other programmes in Ghana). Factors such as local control over resources and mechanisms for accountability within and to communities are cited by Camfed as critical. This warrants further exploration.
- Community led interventions are prey to the 'myth of the community' issue. In reality, communities are divided and complex. The literature recounts qualitative evidence which shows that this hinders the strategy's operation. For example, case studies from Sutherland-Addy's (UNICEF, 2002) UN-commissioned (independent) extensive evaluation of the girls' education activities in Ghana since 1987 particularly highlights community divisions hindering community library projects and other community sensitisation activities. However, she also notes the way in which divisions impacted negatively on wide ranging strategies for girls' education, from school feeding to scholarships. This perhaps suggests a need for more, not less, investment in community relations. It also points to the need to focus on the process of engagement and accountabilities to communities as critical success factors.
- Other community-led/based interventions, such as the Forum for African Women Educationalists' (FAWE) girls' radio advocacy programme whilst interesting and innovative, provide no solid data on which to assess impact, and emphasises the need for a 'built-in' focus on improved monitoring and evaluation (M&E).

Conclusions

Overall, the evidence base for this strategy is extremely limited. What does exist looks at impact of wider ranging projects, with community mobilisation as one component. It is therefore impossible to disaggregate its impact from other strategies. That said, it is also hard to say how successful those projects would have been *without* some form of community mobilisation/sensitisation, and as mentioned before, community sensitisation/participation in some form or another has often been a 'wrap around' to

other interventions. As noted, there has clearly been differential success between programmes, including on prospects for sustainability. This points to the vital importance of 'process' in community engagement, and represents a key area for further research.

4. Child protection and safety:

Training, development of codes of conduct, school guidelines to ensure girls' safety in the school environment.

Although there is considerable international evidence that violence in schools does affect attendance and performance in schools¹⁷, there is far less evidence on whether strategies to tackle it actually work. It is extremely difficult to link improvements in enrolment, retention and transition, or achievement to this strategy and there are no studies which do so successfully. On this strategy, any 'impact' evaluation works on the assumption that addressing the issue contributes to improved school quality, which impacts on a safer learning environment, and this increases the chances of girls (and boys) going to and staying at school. Indeed, the aims of programmes using this strategy are not explicitly to increase enrolment, retention and transition, but to create tools/codes and to ensure safety for girls in schools. The use of this strategy is a relatively recent approach compared to that of school feeding, or scholarships, for example. This may be one reason why the evidence base is much less developed.

- Dunne (2007), in robust qualitative research (using a very small sample but useful for its depth and nuance) in Ghana and Botswana argues that school initiatives on counselling, where they worked effectively, did make a difference. In what they identify as their 'high performing' schools sample (three schools) in Ghana, a guidance and counselling officer had been appointed. However, the research notes problems with the system of counsellors, with referral to them being used more as a form of discipline than support.
- In Ghana and Malawi, the Safe Schools (USAID) programme carried out national level advocacy; community level action plans; developed a teachers' code of conduct; and training programme for teachers, students and community counsellors. Their (external) evaluation report is based on a baseline/endline survey of 800 pupils and 400 teachers (DevTech Systems Inc., 2008). The data shows changes in attitude and awareness, though not in practice. It notes the following:
 - Teachers became more aware of how to report a violation related to school-related gender-based violence: an increase from 45% to 75%.
 - Pre-project, roughly 30% of teachers agreed that girls could experience sexual harassment at school, increasing to nearly 80% post intervention.
 - In Ghana, the percentage of students agreeing that "You have the right not to be hurt or mistreated" increased from 57% to 70%.
 - In Malawi, pre-intervention, 70% of girls disagreed that 'it was okay for a teacher to get a girl pregnant as long as he married her', increasing to 90% post intervention.
- Camfed's programme in Ghana also addresses the issue of child protection in its work with school counsellors and teacher mentors combined with advocacy by district

¹⁷ For a useful summary see Antonowisc, *Too Often in Silence*, 2010.

officials and mothers' support groups¹⁸. Camfed's 2010 baseline survey (discussed previously) shows some differences in attitudes in schools which are new to the programme and those where the programme is well-established, suggesting some impact on awareness and attitudes. For example, on the question of whether the girl invites sexual advances, 57% in schools where its programme is established agree, compared with 74% in schools that are new to the programme. Giving some clues as to the uptake of services provided under this strategy, the data shows that more parents in longstanding partner schools said they would talk to the teacher mentor or guidance counsellor (15%) compared to only 4% in new partner schools, though this was still the third option after the school administration (56%) and approaching another teacher (16%).

- Robust, qualitative research in Ghana, Zimbabwe and Malawi by Leach et al (2003) suggests that girls' clubs are an effective way of increasing the level of assertiveness and confidence in girls to enable them to speak out on issues of abuse in schools. They also find that community drama durbars and radio programming created larger awareness about the issues had an impact on reducing teenage pregnancy at school and increasing girls' assertiveness.

Conclusions

Given the general consensus in the literature on the magnitude of the problem of child protection in schools there is surprisingly little evidence available on the impact of strategies to combat it. Sufficient evidence does not exist on whether developing teachers' codes of conduct, the presence of counsellors or other protection strategies actually work. However, there is some evidence that attitude change on child protection issues can be achieved by this strategy. Whether it is the existence of the code of conduct that changes attitudes, or the 'communal' process of it that has this effect is also not clear, though the evidence leans towards suggesting it is the *process*. More work needs to be done in terms of research and monitoring and evaluation on making explicit the link between a school environment which takes seriously child protection and positive learning outcomes. This also relates strongly to the issue of school governance (see strategy 11).

5. Gender friendly infrastructure:

Interventions such as separate toilet facilities for girls, and ensuring hygiene for girls.

Despite sweeping statements in the 'problem' literature that separate toilet blocks and strategies related to menses are key to girls' access and attendance levels at school, robust evidence to support it is hard to come by.

- Provision of menstrual cups: the only robust evidence which exists suggests it does not appear to actually affect girls' schooling outcomes (Lloyd, 2009). Oster and Thornton's (2009) randomised trial of the provision of menstrual cups in four schools in Nepal compared the attendance and performance of girls in seventh and eighth grade. Among girls in the treatment arm of the trial, 60% adopted the cup (reported by the nurse on monthly school visits). However, there was no statistically significant difference between the girls in the treatment arm and the control arm of the

¹⁸ These stakeholders receive training and have monitoring responsibility on child protection issues as part of Camfed's programmes.

experiment in attendance rates or test scores. It should be noted that, at the schools in question, absenteeism due to menstruation was small to begin with, with an average of 1.3 days of school over the course of the year missed due to menstruation (ibid.).

- A randomised trial in Ghana testing the provision of sanitary cups on attendance has been reported (Scott et al, 2009). Reviewing the paper, Oster and Thornton (forthcoming) report ‘the study shows positive effects on attendance but there are questions about the credibility of the results because there were only four villages, the two villages with the intervention were not randomly assigned, the attendance data are self-reported rather than independently observed and the authors do not appear to have collected data on days of menstruation’. Scott et al acknowledge the limitations of their own study, including its short duration (Winter/Spring school term), small number of sites, and relatively small sample size, as well as the novelty effect of the intervention in the rural areas. They caution: ‘it is essential that further study over a longer period of time be done before policy decisions committing substantial funding, especially from poor governments, occurs’.
- Birdthistle et al’s (2011) systematic review on single sex toilets finds no evidence for or against their impact on girls’ educational outcomes (none of the studies they reviewed could untangle the issue of separate toilets from wider water, sanitation and hygiene (WASH) interventions), nor do they find any sound evidence on the impact of wider WASH interventions, as the data again is not impact linked¹⁹. They do note, however, that much qualitative research confirms that menstruation (cramps, embarrassment etc) is given as a reason for absenteeism.
- In Ghana, a number of programmes have included a gender sensitive infrastructure component such as CS, which included latrine building and provision of water. As discussed in relation to strategy 1, this ‘package’ project had modest gains in access but no clear positive impact on retention or transition, or learning outcomes. As with QUIPS and SAGE (which also included some infrastructure work on separate latrines for girls and boys), it is difficult to isolate the gender friendly infrastructure component as having had a particular influence.

Conclusions

In the case of strategies addressing menses, there is little evidence and what exists is small in scale and inconclusive. In the case of single sex latrines, as the DFID systematic review concludes, there is an absence of data to assess whether this has impact, based on the same reasons outlined under many strategies in this report – i.e. it is impossible to disaggregate data from ‘package’ interventions. This is also true of wider WASH interventions. The evidence base certainly needs to be stronger in this area, given the level of investment that is being made.

¹⁹ To better understand the impact of WASH interventions on girls’ educational outcomes, they recommend at least two additional well-designed, cluster-randomised trials in order to generate sound evidence from different contexts, where cultural and environmental factors differ (e.g., religion and access to water, respectively).

6. School feeding and other health-related programming: As an incentive to come to school, improve concentration and growth.

School feeding and Take Home Rations (THR) are widely used strategies internationally, targeting attendance as well as learning outcomes²⁰. Given the current global food, fuel and financial crisis school feeding has a 'new prominence' (Bundy et al, 2009a). These measures target the opportunity costs and direct costs of schooling; and they target learning outcomes by improving nutrition, which is linked to improved concentration. Despite concerns about the sustainability of this strategy there is evidence to suggest that school feeding does improve girls' attendance and retention especially, and also some evidence that it improves learning outcomes. However, there is also some evidence to suggest that school feeding programmes can cause disruption in the school timetable, thus impacting negatively on learning. THR are less open to this critique. THR appear to provide an additional level of targeting, as they need not cover all children in a given school; rather they can be focussed on particularly vulnerable pupils. The provision of de-worming tablets shows significant, positive impact on girls' attendance. The World Food Programme (WFP) (Bundy et al, 2009a) notes that school feeding is particularly effective in combination with de-worming.

International evidence

- A large amount of the evidence arguing for the efficacy of school feeding as a strategy for girls' education comes from the WFP. Internal evaluations by WFP (2001a) report documents case studies from Cameroon, Morocco, Niger, and Pakistan which indicate that in each case, girls' attendance increased by at least 50%. The report argues that these increases will last.
- Offering more nuanced analysis, a recent meta-analysis of WFP survey data from 32 countries in Sub-Saharan Africa (Ahmed et al, 2007) grouped 4,000 primary schools according to the type and length of the school feeding programme: those with established programmes (on-site meals or take-home rations), those with programmes of less than 12 months, and those that had yet to initiate a programme and so could serve as proxy controls. During the first year of school feeding assistance, absolute enrolment increased by 28 % for girls and 22 % for boys. After the first year, enrolment trends varied according to the type of programme. When only on-site meals were provided, there was a change only in the first year of the programme; after that the rate of absolute enrolment of girls reverted to levels similar to those before implementation. However, in the highest primary grade, with school feeding programmes combining on-site feeding and THR, girls' absolute enrolment increased by 46 % per year, more than twice the yearly increase in the same grade in schools implementing only on-site feeding. The provision of THR appeared to support the progression of girls through the primary school grades, suggesting a reduction in the dropout rate of female students, particularly in the higher primary school.
- An evaluation of India's Mid-Day Meals (MDM) programme, the largest school feeding programme in the world, found that female school participation was approximately 15 % higher in schools that provided the MDM programme than in schools that did not

²⁰ Using the WFP definitions, school feeding is either the provision of meals in school, or high energy snacks and biscuits. THR involve the transfer of food resources to families conditional upon school enrolment and regular attendance of children.

(Drèze and Kingdon, 2001). However, the MDM programme did not appear to have a detectable effect on the enrolment of boys.

- In terms of reaching the most vulnerable, emerging evidence shows that in areas with high HIV prevalence, school feeding and THR, has the potential of enhancing enrolment, attendance, and progression of orphans and other vulnerable children (Edström et al, 2008).
- Evidence suggests that school feeding programmes have the potential for improving educational attainment (especially in maths), as evidenced by results of several randomised controlled trials (e.g. Jukes, Drake and Bundy, 2008 on Jamaica; Ahmed, 2004 in Bangladesh; Whaley et al, 2003 in Kenya)²¹. These studies do not, however, offer a gender perspective.
- Bundy et al (2009a) cite various international evidence that administrative costs of school feeding programmes can be high, at between 30 and 40%. This points to the importance of consideration around the mechanisms for delivery.

Caveats

- The international evidence on this strategy highlights considerable concerns with the implementation of school feeding and THR programmes. These include: selection criteria (and the potential for impact on the poorest and most excluded, including out-of-school youth); sustainability; impact on teachers' time for distribution (and linked impact on enrolment, retention, transition and learning outcomes). These are discussed in reference to the Ghana literature below.

Ghana-based evidence

- In Ghana much of the evidence comes from WFP evaluations. WFP interventions have been implemented by a range of partners, including Catholic Relief Services (CRS) and ISODEC and have involved both school feeding and THR for girls. All WFP evaluations note improvements in girls' enrolment, retention and transition, though they do not address achievement. Interventions have been at primary and JHS, with limited support offered to graduates of the programme entering SHS.
- A 2010 (external; 2010b) WFP Country Programme Evaluation reports that THR for girls (in 18 districts) increased completion rates over the three year period of implementation (2006/07-2008/09) from 64.6 % completion at primary to 76.3 %. The report notes that this followed the general trend in the population of girls in northern Ghana.
- The same report details findings from district trend analysis on retention which indicate that retention is lower at primary levels compared to JHS for girls in northern Ghana. They suggest that this indicates that once girls transition to the higher levels of schooling they are determined to complete basic education, a finding that was triangulated in qualitative interviews with recipients. While the average retention rate was 59.6 % among girls at the primary, at JHS it was as high as 85 %. However, the report notes that this may be the result of the phasing out of the THR ration at the primary level and other factors to do with the larger number of girls at the primary

²¹ For a useful full discussion, see Bundy et al, 2009, pages 21 – 25.

level compared to the JHS level. In fact, the programme was redesigned to follow a cohort approach of supporting 40,000 girls who would eventually graduate from the primary school level and enter JHS level over the life of the programme. A phasing out of primary schools and phasing in of more JHS schools was therefore embedded in the strategy.

- Transition to secondary school: data from qualitative interviews with regional and district education officers as part of the WFP 2010 evaluation suggest that several girls who were part of the THR programme are now awaiting sponsorship from WFP and GES which will enable them to continue to SHS level. The report suggests that the THR as a potential strategy for attracting, retaining and changing the attitudes of parents towards their girl child's education was apparent during interviews at the community/school level among parents and with girls themselves. However, the report notes that 'the programme built unmet expectations among the girls'. Several of the girls who achieved BECE results good enough to transition to SHS were unable to find financial support for SHS (at the time of the evaluation 2010 the WFP only budgeted for 150 girls with SHS scholarships). The evaluation notes that 'the lack of transition to higher levels also has a devastating impact on girls' expectations and vision of their future'.
- Seidu's (2003, cited in Akyeampong, 2007) Ghana-based study offers an alternative view on school-feeding in the country. He argues that although food aid is an incentive for girls to enrol, attend and remain in school until completion, creating more awareness of the importance and benefits of girls' education was equally important in improving girls' participation in basic education. Using data from the East Gonja District of Northern Ghana, the study found no statistically significant difference in enrolment before and after food aid. This study highlights the importance of looking at the synergies between school feeding programmes and other (health-related and other) interventions, as well as the process of engagement with the community on this issue.
- A 2001 internal evaluation by CRS of its THR highlights issues emerging from focus group discussion concerning the process of identification of beneficiaries. It suggests the THR did not necessarily capture the neediest, because in classes 4-JHS there were often as few as three girls in a given class, and therefore they were all chosen. Interviews with head teachers and teachers in schools which had THR at the upper primary and JHS levels indicated that without the THR there would not be as many girls attending school and transitioning to JHS since traditionally, girls were often used in the home to take care of younger children, help their mothers and eventually be married at a relatively young age. Schools where there was THR had significantly more girls attending the JHS compared to schools which did not have the THR.
- Evidence suggests that, if not well-managed, school feeding could impact negatively on learning. The 2010 WFP evaluation (2010b) notes 'school observations and interviews with head teachers revealed that school feeding was reducing...contact time...by an average of one hour'. The report further notes: 'most schools visited were having trouble coping with increased numbers of children and managing the school feeding programme due to a variety of reasons including lack of oversight and clear role definition for the head teacher in the SF programme'. The evaluation assesses that

'compared with school feeding, THR were also more efficient and manageable in under-resourced schools'.

- Joseph and Wodon (2012 a) offer preliminary findings on the impact of the Ghana school meals programme on enrolment, repetition and drop out at primary and JHS. This study finds a significant increase in enrolment at primary school (more than any other variable tested), especially over several years. The biggest increases are found in the second and third years of programme implementation but enrolment wanes on the fourth year. The authors attribute this to the fact that those who were attracted because of school meals will have already joined. They note that some students could be 'school switching' to new schools on the introduction of a new school feeding programme. The findings also suggest a reduction in drop outs in year two of implementation but an increase of repetition in year one. In JHS, they find that school meals are associated with higher enrolment but only in the first year, so that the effect is smaller than in primary school. They also find a reduction in drop outs in the first year, but of marginal significance. As with all quantitative research, it is limited in its capacity to (and nor is it intended to) ask questions that underlie the data. For example, does 'school switching' occur, and if so how often, why, who decides and who (boys or girls) switch? What effect does the increase in repetition have?
- Another forthcoming paper by the same authors (2012b) looks at school meals programmes in relation to learning outcomes – albeit only at primary level. This has limited value for looking at meals programs at higher levels through a gender lens, however, as learning outcomes at primary level are virtually equal. Their findings show a negative effect on test scores (as do capitation grants). However, they caution that this should not be interpreted as suggesting that school meals and capitation grants should be curtailed, as this partial correlation could be connected to the fact that these programmes by definition target lower performing schools in deprived districts. When disaggregating by rural/urban, school meals are associated with higher test scores in rural areas. However, the findings suggest that the availability of school meals has a larger negative impact on girls than on boys, 'possibly because the impact on enrolment is larger for girls than boys'; but again, this is compensated for in rural areas 'by a gain of a similar magnitude according to the interaction effect'.

Other health-related interventions

- Deworming: a range of robust research evidence suggests that deworming through schools is safe, cheap, and remarkably cost effective in terms of its impact on school attendance (Bundy et al, 2009b; Miguel and Kremer, 2004; Abdul Latif Jameel Poverty Action Lab 2005; Bleakley, 2007), whether implemented as a stand-alone intervention through schools or implemented at the margins of a school feeding programme. For example, Miguel and Kremer's (2004) randomised evaluation of a programme in Kenya that provided twice-yearly school-based mass treatment with inexpensive deworming drugs found health and school attendance rates increased not only among students who were provided with the drugs, but also among students at nearby schools, apparently due to reduced disease transmission. Including this "spillover effect" to children at neighbouring schools, the study suggests that the programme increased schooling by 0.15 years per person treated at a cost of only \$3.50 per additional year of schooling induced. Although this study did not have a gender dimension, it is clearly a gender neutral intervention that would benefit girls. Impact on achievement is not addressed by all of the above studies, except by Kremer, 1999, which assesses that

treatment is not significantly associated with academic test score performance or promotion rates.

- Peer reviewed research on Ghana by Fentiman, Hall and Bundy (2001) note that health interventions targeted at infants and first years of primary schooling help to improve enrolment to a significant extent.

Conclusions

There is concrete international evidence that this strategy positively impacts on enrolments, retention and transition. The evidence base in Ghana is dominated by that of WFP evaluations. From this, THR seem to have been particularly effective in terms of girls' transition from primary to JHS, and once there, data shows girls receiving THR manifesting higher than normal retention rates. The literature (international and Ghana-based) highlights multiple caveats, indicating that this strategy is by no means a 'silver bullet' (and of course will do nothing alone e.g. if it encourages enrolment at schools with few teachers, for example), and, depending on how it is managed, that it can be an administratively high cost activity. In the case of THR there are questions concerning selection of recipients and whether the poorest and most marginalised are actually reached (especially because those who are the poorest may not actually be at school and therefore not able to be selected); though used well it has the potential for accurate targeting of the most marginalised. In the case of THR and school feeding, evidence suggests a negative impact on contact time with teachers, especially in under-resourced schools (which are of course typically those likely to be included in programming) – but less so with THR. These are important caveats given the current overwhelming concerns in Ghana with quality, attrition and over-age enrolment. However, they are caveats that can probably be addressed with careful management. There are strong pieces (though not a huge body) of international research which suggests that other health-related strategies, such as de-worming, have a considerable positive impact on girls' enrolment, at a very low cost.

7. Recruitment/training of female teachers, assistant teachers, and other educators.

This includes training programmes, hiring policies, and the use of complementary teaching staff in large classes to enhance gender balance in the classroom.

There is overwhelming consensus in the literature that the lack of female teachers is a crucial issue²². There is accompanying evidence that strategies to address it do impact on girls' enrolment and retention as well as on their learning outcomes. The shortage of female teachers is an extremely complex and indeed circular problem, and strategies targeting it need to be sensitive to this. The literature shows that (mirroring the girls' education 'beyond access' model), strategies need to go 'beyond recruitment' in terms of numbers alone. Firstly, with fewer girls completing the required grade to qualify for teacher training, there can be fewer female teachers and thus fewer female role models. Teacher training models need to address this. Secondly, conditions in rural areas mean that young, female teachers may face challenging environments, with particular issues concerning safety, cultural expectations regarding marriage (which may not be fulfilled if

²² Certainly, a classic characteristic of places where girls' educational outcomes are particularly low is the absence of female teachers. E.g. in northern Ghana, the 2008/2009 EMIS reports that 41% of primary school teachers and only 19% of Senior High School teachers are female (Camfed, 2010).

posted to a rural area) and so on. This may mean that recruiting more female teachers could in fact *contribute* to teacher absenteeism²³. Given the wider policy issues discussed earlier in this report and evidence which shows girls' educational outcomes to be more sensitive to quality, the issue of teacher attendance is prerequisite to the success of this strategy.

International evidence on recruitment strategies

- Evidence on positive impact on girls' enrolment is strong. A recent multi-level analysis (linking household- and district-level data) of primary school enrolment in 30 developing countries found that girls' enrolment, but not boys', was positively associated with the percentage of female teachers in the district (Huisman and Smits, 2009). Kim, Alderman and Orazem (1998) seem to reinforce this; however, the interventions the studies address were not solely concerned with female teachers. Banerjee and Kremer's (2002) randomised study provides similar evidence from non-formal schools in a low-literacy area of rural India. They evaluate an experiment which involved placing a second teacher (primarily, though not always female), to non-formal, NGO-run single-teacher schools. Girls' attendance increased by 50%, while boys' attendance was not affected. It is not clear, though, whether the gains can be entirely attributed to the fact that teachers were female (the extra teachers also increased the number of days schools were open and generally enhanced the quality of the school).
- Much of the positive evidence for this strategy is associated with conservative cultures (Yemen, Pakistan, etc – see Tietjen, 1991) – a noteworthy point given Ghana's NR GPI and more conservative culture.
- Some 'evidence' is less clear. For example, UNICEF's 'Strategies for Girls' Education' (2004a), the Kenya-based DFID funded 'Strengthening Primary School Management' project. The report suggests a causal link between the increased proportion of female head teachers at primary level and the improved primary school completion rate nationwide over the same time as the project life. The evidence for this link is unclear, however, and it is highly unlikely that this achievement was due to the initiative alone, operating as it was simultaneously with a range of educational interventions in the country. This is of course not to say it was an ineffective strategy, but the evidence is inconclusive.
- 'Beyond access' outcomes are supported by the international evidence from a range of countries, with findings from different studies often reinforcing each other. In Bangladesh, Asadullah and Chaudhury (2006) find that female teachers increased girls' percentage of correct answers in secondary level mathematics and associated the presence of female teachers with more enlightened attitudes towards working women and higher education. This study, however, is unpublished and thus not peer reviewed. In Mozambique, Handa's (2002) peer reviewed analysis of supply and demand side issues of primary education found positive impacts on learning outcomes, but only if teachers were trained. Michaelowa's (2001) peer reviewed five-country study (Francophone Africa), found that fifth grade girls' knowledge gains were larger when taught by a female teacher whereas boys benefited more from a male teacher. Rugh, (2000) on Botswana cites a positive relationship between schools with a higher proportion of female teachers and improvements in girls' achievement levels,

²³ Kirk (2006) provides a fuller analysis of these and other related issues.

accomplished without any disadvantage to boys. Banerjee and Kremer (2002) found no evidence of improved test scores; however another study on a similar experiment in India in rural and urban sites does (Banerjee et al, 2003): a community-based remedial education programme hired young women from the community to teach 'catch up' literacy and numeracy and after two years, learning increased by 0.39 standard deviations with the highest gains among the least able students. The 'local hire' element (one teacher to around 20 pupils) is also cost effective: the average cost of the programme is only \$5 per child per year. Herz and Sperling (2004), remark: 'at the margin, extending this programme could be 12–16 times more cost effective than hiring new teachers'. However, the scores in this trial are not sex-disaggregated so it is not possible to assess the female teachers' impact on girls' learning specifically.

Caveats

- Fine-grained, qualitative research from Uganda (Mirembe and Davies, 2001) and Pakistan (Kirk, 2004) challenges the assumption that women teachers are *necessarily* supportive of girls in schools or will make the school environment any more girl-friendly. The research provides evidence that women teachers may also reinforce gender stereotypes and are not necessarily aware of gender equality concepts. Often subject to the same gender assumptions, discrimination and even sexual harassment and abuse that girls face in schools, this may make it hard for them to deal with those issues facing girls in schools. This research highlights the importance of gender training (discussed in the following strategy) for all teachers.

Ghana-based evidence

Joseph and Wodon's analysis of the EMIS data (2012a) provides some evidence that, at primary level, the presence of female teachers is statistically significant in terms of improved learning outcomes, and that this is larger for girls than for boys. If these female teachers are trained, this 'gives an extra boost to test scores'.

Joseph and Wodon's NEA/EMIS paper (2012b) discusses the strategy in relation to impact on enrolment, repetition and drop out, and concludes that more *qualified* teachers in general appears to increase overall enrolment but does not affect drop-out or repetition in primary school. Further, they find that more *female* teachers tend to have a positive impact on enrolment, whilst more female *and* qualified teachers may reduce drop outs –but the effects are only marginally statistically significant. At JHS, the only significant association they find is that more qualified teachers, as well as more female teachers, help increase enrolment.

Conclusions

There is a sound body of international evidence base that suggests the strategy of the recruitment of *trained* female teachers has a positive effect on enrolment, and on learning outcomes. Lloyd's (forthcoming) review argues 'studies find even very young women can teach curricula effectively, if they are trained and given support, ...although finding qualified women teachers is difficult, and age and education requirements may have to be temporarily eased. But this doesn't have to mean a decline in quality'. There is also a small amount of evidence which suggests this strategy may impact positively on transition and on girls' 'empowerment', including aspirations and career choice. A small evidence base cautions us against assumptions about female teachers *necessarily* being better for girls. More research is needed to clarify this. For Ghana, there is emerging quantitative evidence which supports the international findings, at least at primary and JHS. Overall, the research

literature suggests that this strategy is effective but complex, and merits more research and impact evaluation.

8. Gender training:

Sensitisation for teachers, administrators and school bodies; curriculum development.

Interventions under this strategy primarily include gender training for teachers, other educators, School Management Committees/Parent Teacher Associations (SMC/PTAs) and national/regional/district level officials; as well as sometimes complete overhauls of national curricula, to make them more 'gender sensitive'. There is considerable agreement in advocacy and policy documents that gender insensitive curricula are problematic²⁴; that gender insensitive pedagogy discourages girls from both attending and from achieving their full potential²⁵, and that gender equitable atmospheres in schools discourage premarital sex (and therefore could impact on retention and completion)²⁶. However, the evidence base on the strategy is limited – though again, this does not mean the strategy is ineffective.

International evidence

- In terms of reform of the curriculum, Rugh (2000) notes that Malawi set up a Gender Appropriate Curriculum Unit to improve the curriculum, institute it in schools, assess results and reform teacher training and textbooks. She states: 'Among African countries, Malawi stands out in its high enrolment rates for both boys and girls in primary and secondary school'. However, the link to the reform of the curriculum is unclear.
- There are robust studies from a range of countries which show that better/more training in general (i.e. not gender training as such) improves demand for education, and for girls even more than boys (e.g. Lloyd et al on Kenya, 1998; and Khandkher on Bangladesh, 1996). Similarly, a study from Swaziland finds that teacher training helped raise girls' enrolments to boys' level (Gilmore, 1997). In this case, teacher training was one of a package of interventions including an increase in teachers and considerable investment in teacher training and resource centres. However, as this is based on the reporting of a 'success story', the data does not allow us to conclude that the impact was actually due to the strategy alone, though it is likely to have been a contributory factor.
- Evidence from Zambia suggests that training in child-to-child approaches can effect achievement. Mwape and Serpell, (1996) and Serpell, (1998, 1999) showed that child-to-child techniques led to a dramatic improvement in educational outcomes for girls – in child-to-child classrooms the qualification of participating students for admission to secondary school improved to 74%, with girls accounting for two-thirds of this figure, in contrast to averages of 33% and 29% for two non child-to-child classrooms.

²⁴ E.g. Gachukia et al (1992); Obura (1985); Biraimah (1980); Ethiopian Ministry of Education (1980).

²⁵ E.g. Appleton (1995), Lloyd, Mensch and Clark (2000); Dunne 2007 (on Botswana and Ghana) for a particularly sensitive analysis of the gendered nature of schools.

²⁶ Lloyd, Mensch and Clark (2000) (cited in Lloyd, forthcoming) found that girls who attended schools with greater gender equity in attitudes and treatment were less likely to have had premarital sex than girls attending more inequitable schools.

Ghana-based evidence

- A number of the 'package' programmes in Ghana (including CS, Camfed and SAGE) have incorporated an element of gender training for teachers, other educators and education administration (from school to national level). As is the case with finding evidence for the other strategies discussed in this report, none of the evaluations seek to disaggregate the impact of one strategy from another, hence it is impossible to attribute any improvements to gender training *per se*. Evidence is generally anecdotal, offering little insight into which interventions had an effect.
- One programme which focused on 'quality' in particular, with a considerable amount of energy devoted to teacher training, was the USAID QUIPS programme. Though it did not have an overall gender focus, one particular aim of the in-service training programme provided was to 'encourage girls to participate'. In its evaluation, drawing on qualitative interviewing with teachers, this emerged as the most prominent classroom 'good practice' where association with learning was statistically significant, in both the north and south. It also: 'emerged consistently for all subjects at all grade levels as being significantly related to pupil learning, even after controlling for a variety of other factors' – the report does not specify what the 'other factors' were. The evaluation also notes: 'quantitative results identified "encouragement of girls' participation" as significantly related to learning growth and identified a significant relationship between communities that supported girls' education and schools demonstrating a high pupil achievement outcome'.
- Overall, after two years of interventions, the evaluation notes that both total enrolments and the percentage of girls enrolled were higher for QUIPS than for control schools (ANOVA results showed statistical significance, $p < 0.05$). This was observed in northern, middle, and southern Ghana and in both urban and rural locations; it was accentuated slightly in middle Ghana. Partnership schools also showed an achievement advantage on the Criterion Referenced Test (CRT) compared to the nation, with scores 3.6% higher in English and 2.1% higher in mathematics. The report notes, however, that the pass rate on the CRT for English (13.2%) and mathematics (6.3%) was notably low, even for QUIPS pupils. This data is not gender disaggregated.
- The evaluation assesses that 73% of the teachers it trained demonstrated pupil-focused instruction, including: effective questioning, encouraging pupils' (especially girls') participation, provision of feedback, applying a variety of methods and materials, and stimulating critical thinking. However, the report also notes that field observations suggest 'limited spread and sustainability...Once teachers were no longer provided the support and guidance that was characteristic of the QUIPS interventions, the practices were impeded'. Crucially, it suggests that reforms were most sustainable where the head teacher 'championed' the QUIPS approach, and where there was a critical mass of QUIPS trained teachers in the school. This suggests that a cascade/trickle down approach whereby only a small number of teachers are trained in gender friendly approaches with the intention of techniques being passed on or absorbed by others may not work, and highlights the importance of targeting school leadership.
- World University Service of Canada's (WUSC) Girl Child Education programme in Ghana involved an attempt to mainstream gender awareness and gender analysis capacity

through the Curriculum Research and Development Division (CRDD). The evaluation (MacKinnon, 2002a) is not able to show impact on girls' educational outcomes. It does report that there was wide national endorsement of gender sensitive curriculum and teaching materials by the GES for use in the Ghanaian basic education and teacher training systems and that it enhanced the abilities and skills of CRDD and Teacher Education Division staff in the areas of analysing, reviewing and developing gender sensitive curriculum.

- FAWE (2008) offers some evidence. Their (2008) evaluation argues that their work on a gender responsive pedagogic model in Uganda, Ethiopia and the Gambia resulted in a change of classroom and school culture ensuring higher degrees of class participation from both boys and girls and an improvement in academic performance after the introduction of the gender-responsive pedagogy (although no figures are available).

Conclusions

Generally, the evidence base directly connecting this strategy to improved enrolment, retention, transition and achievement is fairly weak. However, it is a strategy that is concerned with quality, and there is international evidence that girls are more sensitive to variation in quality than boys. There is also some evidence that suggests that teacher training in general impacts more on girls than boys and that it affects both enrolment and achievement. There is no international evidence on whether gender training or 'girl-friendly' approaches specifically have a similarly positive impact on girls in terms of enrolment, retention, transition or achievement. Concerning the curriculum, the literature is dominated by studies that show how curricula are gender insensitive rather than whether attempts to 'engender' them work. In Ghana, many 'package' programmes incorporated gender training elements but it is difficult to disaggregate their effect.

9. Mentoring, tutoring, peer support:

Activities to support girls' development and learning needs through engagement with peers, older women, other adults.

Despite a large number of girls' education programmes including a strand of these types of interventions, there is very little available evidence on their impact. Indeed, Lloyd's (forthcoming) review of the evidence on girls' education argues that there is no evidence of the effects of 'girl-friendly environment' interventions on attendance, retention, attainment, learning, empowerment. We have found glimmers of evidence from package interventions which have included this strategy (for example, CS, as previously discussed), but this is impossible to disaggregate.

Much of the data in this area remains anecdotal. MacKinnon's (2000) Report on "Improving Girls' Self Esteem in Ghanaian Basic Schools" under the WUSC Girl Child Education Project, offers some qualitative evidence to suggest girls' clubs do impact positively on self-confidence; but this is not linked to educational outcomes. The WUSC 2011 evaluation report on the Unitera Girls' Education project, with girls' clubs a key strategy, concludes that although there appears to have been an improvement in transition, retention and completion rates for basic schools and SHS, there is not hard statistical evidence to support this assertion, particularly with respect to gender disaggregated data from the regions (WUSC, 2011). Despite the lack of hard evidence, the 2004 SAGE evaluation recommends

that 'the establishment [of girls'] clubs as well as the establishment of a support system should receive urgent attention from the GEU in collaboration with actors in this area' (Ofori-Bah, Kudzi and Donney, 2004).

Conclusions

As noted for other strategies, the lack of hard evidence does not mean this strategy is ineffective. Anecdotal evidence suggests it may be, and this may also be a promising area for high quality impact research and evaluation.

10. Complementary education:

Flexible, community-based education targeted at out of school youth.

There are a number of well-known complementary education programmes, many of which aim to reintegrate out of school youth into the mainstream education system. Some of these have had considerable success in terms of learning outcomes per se, as well as having a high success rate in terms of reintegration. However, overall, data on these programmes is limited, though there is certainly scope for improving this. Very often, the strength of these programmes is their flexible approach – timetables may be altered to suit communities/girls (distance learning being the most extreme example of this); the curriculum may be altered (often compressed, and mother tongue use is common); and requirements for teacher qualifications may be lowered. These programmes have often been used with communities at the margins, such as pastoralists.

International evidence

Bangladesh's BRAC (Bangladesh Rural Advancement Committee) accelerated learning programme is one of the best known and best documented interventions. Flexible "satellite" schools were considered a great success, with a range of studies documenting increased girls' primary school enrolments. Girls comprised 63 % of those enrolled, and less than 1% dropped out. 90% of BRAC graduates made the transition to formal government schools in grade 4 (Sukontamarn, 2005). According to Rugh and Bossert (1998) '[BRAC] unquestionably leads to the increased participation of children in terms of enrolment, attendance, and completion.' Another example of impact on enrolment is the Balochistan community schools programme (see strategy 2) where rural community-based schools increase girls' enrolments to more than four times the provincial average (Liang, 1996). As discussed previously, it is hard to assess whether this impact was attributable to the reduced distance to schools for girls, the alternative schooling model, or the presence of female teachers (part of that model). A number of the examples discussed under strategy 7 (female teachers) are also relevant here, in that they took place in non-formal education centres/schools. Again, it is hard to untangle to what the improvements were attributable – however, there does appear to be a synergy between non-formal education centres' flexibility in terms of recruitment and their hiring of female teachers, and improved results (for boys and girls – no evidence for girls alone).

Ghana-based evidence

A number of complementary education programmes have operated in Ghana. However, the data from studies on these programmes is limited. The School for Life (SfL) programme, in northern Ghana, aimed to provide good quality intensive 'basic education' in nine months, with a view to mainstreaming graduates into state schools. The programme

covered about 25% of communities in 30 districts from 1995 to 2001. Hartwell (2006) reports more than 91% completion rates (for the equivalent of 1st to 3rd grade of primary), with 68 % of girls continuing into the fourth grade of public school. Hartwell (2006:2) notes 'much of the retention is credited to the SfL's short duration of only nine months'. Casely-Hayford and Ghartey's (2007) evaluation of the SfL programme notes: 'the retention rate of girls (Sflers) integrated in the public school is higher than that of boys. On average, 100% of girls from SfL schools surveyed who were integrated in the primary schools stayed and completed their primary school cycle compared to 94.8% boys. Research findings also reveal that SfL graduates once integrated into the formal school system remain in school until completion at JHS. Other similar programmes (such as the ActionAid funded Shepherd School Programme and Care's School Feeder Programme and the Wing School initiative do not yet offer evidence on which to assess their impact.

Conclusions

Whilst the evidence for impact of complementary schooling at an international level looks reasonably strong, the Ghana evidence base (aside from SfL) is as yet undeveloped. This does not mean this strategy should not be pursued. The international literature suggests that synergy with other strategies is important here. For example, community schools allow for a flexible approach which can be highly useful when addressing girls' needs. The potential for alternative programmes appears to be at its highest in areas of multiple disadvantage, and where various forms of marginalisation intersect e.g. girls who are poor and pastoralist (Lewin, 2011). The SfL is now being used by the Create consortium in addressing the educational needs of marginalised children through an adapted model that is now being piloted in Ethiopia (personal communication, Dr Benji Zeitlyn, Create). The new ESP acknowledges the strengths of the MOE's complementary education initiatives and states that these will be maintained. However, there are important questions around whether non-formal schooling can be institutionalised within the normal education system and budget provision; around reintegration into the mainstream system; and the value of 'alternative' systems for both parents and children in a marketplace which demands mainstream qualifications. The literature shows that NGOs and local community based organisations have an excellent record of implementing such programmes and could be supported to target particularly underserved areas; however, the lack of good data emphasises the need for 'impact monitoring' as integral to programming.

11. Strengthening school governance and accountability over entitlements, quality and protection:

Training school-community oversight committees, strengthening stewardship of resources for girls' education.

This is a relatively recent strategy, and there is no evidence as yet either in the international or Ghana-based literature. In Ghana, Camfed has been working on these issues and argues that this strategy is critical to the success of other strategies, e.g. in relation to community engagement which underpins the efficacy of interventions. To date, their monitoring and evaluation has focused on assessing attitudes on whether parents, students and teachers consider structures such as SMCs/PTAs and District Education Committee (DEC; a multi-stakeholder structure comprising district-level officials) to be accountable, empowered, transparent and approachable. The CS project also involved a significant element of the strategy, including strengthening of SMC/PTAs, as did the SAGE and QUIPS programmes.

As previously discussed, the evidence from these projects on impact on access, retention, transition is difficult to extract given the different strands of their interventions.

Joseph and Wodon's forthcoming work on enrolment, retention and drop out (in primary and JHS; 2012a), and a further paper on learning outcomes (primary level only; 2012b), attempts to analyse school governance/accountability issues in relation to exam scores. As indicators of governance they use: whether the school has a bank account; whether the school has a management committee which meets at least once a year; and whether the district circuit supervisor visits more than once a year. In terms of learning outcomes, schools with a bank account tend to have higher test scores, but this is likely to be connected to location rather than school management, making this a problematic proxy. More frequent meetings of the SMC are associated negatively with test scores, while more frequent visits of the circuit supervisor are associated positively. In terms of enrolment, drop out and repetition, they find that SMC meeting does not have an impact, whereas the circuit supervisor visiting more than once does. However, this research is fairly inconclusive as these proxies are limited (e.g. supervisors may be happier to visit better schools more often).

Other Strategies:

- **Compulsory and free pre-school (kindergarten) education as key to improving access to primary and lower secondary education.** There is limited research on this in developing countries. Some research from Nepal does make a case for this argument; this is in the form of an internal evaluation of Save the Children's Early Childhood Development programme (in which 13,000 children participated). Their evaluation showed positive impact in terms of age appropriate enrolment; improved gender parity in primary schools; improved attendance; and improved pass rates, and fewer repeaters and drop outs dropout in first or second grade. Create consortium research in Ghana found 'no strong evidence' that 'free' access to pre-school actually improves the chances of children staying on in school to complete.
- **Science, Maths, Technology (SMT) camps/clinics.** GES, Camfed and World Vision have implemented SMT programmes in Ghana. Camfed's initiative is recent and there is no evidence on its impact as yet, and reports from World Vision were not available. Anamoah and Atakpa (1999) on the GES SMT clinics note a significant impact on enrolment and girls' uptake of SMT related courses at the SHS and tertiary levels. Since the start of the SMT clinics in 1987, records indicated that, of the total number of 3,241 students who took part in the GCE A' levels science examination, only 368, representing 11% were girls. Five years later in 1992, out of the 9,417 students who registered for science at senior secondary level, 2,212 (24%) were girls.
- **FAWE's Centres of Excellence:** These are government schools that have received investment to make them 'gender-responsive.' The Centres are designed to act as a model for enhancing girls' academic and social development. In the Centre for Excellence in Kenya, enrolment has increased for girls from 46% to 229% at SHS level between 2001 and 2008 (and for boys from 49% to 171%). Completion rates have increased from less than 10% in 2001 to 98% as at 2008. The centre's performance ranking in the district has moved from 30th position to the top 5 position out of 40 schools.

Section 5: Final Conclusions

The available Ghana-based evidence on the impact of the 11 strategies highlighted in this review is relatively limited and uneven. This reflects the international evidence base. With this premise in mind, this section broadly highlights the most promising strategies for girls' education, citing Ghana where possible. It makes these statements with specific reference to the current state of education in Ghana (as per section two of this report) and key contextual factors (as per section three). It also draws attention to possible areas for future research and reiterates the need for better quality data and for improved monitoring and evaluation.

1. Scholarships/stipends clearly emerge as an effective strategy for girls' education in terms of enrolment and retention, generally at JHS and particularly at SHS level. This strategy promises most impact if targeting methodologies take account of interacting factors which determine educational outcomes (e.g. using wealth and gender as selection criteria), and if conditional criteria (e.g. attendance) are considered. Because of its general focus on SHS, it is cost effective in that the economic returns to girls' education are greater with additional years of schooling. Longitudinal research into the strategy's impact would make for interesting and valuable evidence of impact on achievement, employment opportunities, social and economic contribution and wider issues of 'voice and choice'.

2. School feeding and THR are effective strategies, and because of their wide use, are quite well-documented. Special care needs to be taken (as above) in relation to targeting, if these interventions are to reach the poorest. More research into whether learning outcomes are affected would be valuable. Furthermore, evidence which highlights administrative issues which impact on pupil/teacher contact and learning time must be addressed if these are to maximise their impact; exploration of the effectiveness of alternative delivery mechanisms for school feeding programmes (including through community engagement) would be useful.

3. More research needs to be done on the impact of the two current strategies in operation in Ghana – **targeted free textbooks and uniforms**. These show promise but lack concrete evidence, and we need to be sure that targeting is effective.

4. There is good evidence that effective **female teacher recruitment and teacher training** have the potential for improved enrolment and retention, and girls' achievement. Evidence shows that better trained teachers in general have more impact on girls' educational outcomes than those of boys'. Female teacher recruitment appears particularly effective in places with more conservative cultures, such as Ghana's NR. This strategy is intertwined with broad policy on teacher placement, and also raises the issue of 'incentivisation'. Although incentivisation is not explicitly explored in this document, this may warrant further exploration. For example: incentives for teachers and schools based on their classes' learning outcomes (especially in more marginalised areas) and for experienced and more effective teachers to teach in the early grades to combat repetition and therefore over-age pupils.

5. Whilst there is little hard evidence on safe environments, there is consensus in the literature (including Ghana-based) that **school-based gender-based violence** is an important 'push' factor for girls. It is recommended to develop ways/future research on assessing the impact on girls' educational outcomes of programmes that address this issue.

The policy and legal environment, and governance and leadership at all levels including the school, are crucial to the success of interventions in this bracket.

6. Strategies that address **distance** have been tried and tested internationally. Simple transport schemes, such as bicycles, do appear to have some positive impact on attendance. These could be tried more widely and better monitored. In terms of secondary schools, distance in Ghana remains a particular issue, especially for girls. The literature on boarding schools is limited, and anecdotal evidence suggests ad hoc arrangements accommodation for girls are problematic. More research could be done into looking at which arrangements have the biggest impact on girls' educational outcomes, and which of these girls and their families themselves favour.

7. Community engagement emerges as a crucial 'wrap around' strategy – although there is no concrete evidence to suggest it is effective alone; nearly all the impact documented in this review has been in projects that incorporate an element of community sensitisation/participation. The notion of 'process' is critical; the 'how' of community engagement and the mechanisms for decision-making and accountability over resources is an area that warrants further investigation, particularly as that factor that will underpin longer term prospects for sustainability of interventions.

8. The literature shows **complementary education** programming to be an effective strategy in terms of enrolment, retention and achievement, with examples of effective programming from Ghana. Flexibility appears to be the key to its success. This is an especially important strategy for girls facing multiple forms of marginalisation. More research and improved M&E on reintegration of pupils into the mainstream system would be of great use; as would research focusing on the 'value' (or otherwise) of alternative education systems (especially to girls in terms of economic and social returns).

9. Two commonly used strategies – **hygiene-related interventions, and gender 'sensitisation' of the curriculum** – have a low evidence base. If these are to be pursued, there needs to be a way of assessing their positive impact, or if it cannot be isolated, then other ways of demonstrating their value need to be explored and documented.

10. Peer support and mentoring interventions, including girls' clubs, are poorly documented but highly prevalent. The evidence that exists shows improved self-confidence as an outcome. As such, research which could verify a link or empirically demonstrate a theory of change between self-confidence/self esteem building and educational outcomes would be valuable.

11. In the process of **programme design and evaluation**, girls themselves need to be asked more systematically and more often what makes them go to school, stay at school, and do well at school. Their views, if collected and analysed well, represent credible evidence on the impact of strategies for girls' education.

12. Strategies must be better monitored in terms of their impact on **hard-to-measure outcomes** that go beyond access and enrolment.

13. More of the **M&E/research** should be less 'problem' focused, and begin with the question that frames this document: *'What Works?'*