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Midline Evaluation Report Innovation Window

Final version

Evaluation Manager Girls' Education Challenge Fund

March 2017

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UK Department for International Development

Evaluation Manager Girls' Education Challenge Fund

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This document has been approved for submission by Coffey's Project Director, based on a review of satisfactory adherence to our policies on:

- Quality management
- HSSE and risk management
- Financial management and Value for Money (VfM)
- Personnel recruitment and management
- Performance Management and Monitoring and Evaluation (M&E)

Ben Ward, Project Director

Signature:

Abbreviations and Acronyms

3ie	International Initiative for Impact Evaluation
BFSS	British and Foreign School Society
ALP	Accelerated Learning Programme
ASER	Annual Status of Education Report
BEAM	Basic Education Assistance
CBE	Community-Based Education
CLC	Creative Learning Centre
CPD	Continuing Professional Development
DAC	Development Assistance Committee
DEO	District Education Officers
DFID	Department for International Development (United Kingdom)
DHS	Demographic and Health Surveys
EFA	Education for All
EGMA	Early Grade Math Assessment
EGRA	Early Grade Reading Assessment
EM	Evaluation Manager
EMIS	Education Management Information Systems
FGD	Focus Group Discussions
FGM	Female Genital Mutilation
FM	Fund Manager
GEC	Girls Education Challenge Fund
GES	Ghana Education Service
HHS	Household Survey
ICT	Information Communication Technology
IDI	In-depth Interview
IGA	Income Generating Activity
IW	Innovation Window
KCCA	Kampala Capital City Authority

LSBE	Life Skills Based Education
MDGs	Millennium Development Goals
MICS	Multiple Indicator Cluster Surveys
MoEST	Ministry of Education, Science and Technology
M&E	Monitoring and Evaluation
NCDC	National Curriculum Development Centre
ODA	Overseas Development Aid
ORB	Opinion Research Business
OOS	Out-Of-School
PbR	Payment by Results
PPP	Public-Private Partnership
PSIPSE	Partnership to Strengthen Innovation and Practice in Secondary Education
RCT	Randomised Controlled Trial
REAP	Rwanda Education and Advancement Programme
RTI	RTI International
SBA	School-based assessment
SCW	Step Change Window
SDG	Sustainable Development Goals
SEM	Structural Equation Modelling
SIP	School Improvement Plan
SMC	School Management Committees
SPW	Strategic Partnerships Window
ToC	Theory of Change
UIS	Institute for Statistics
UN	United Nations
UNESCO	United Nations Educational Scientific and Cultural Organisation
UNICEF	United Nations International Children's Emergency Fund
US	United States of America
USAID	United States Agency for International Development
USE	Universal Secondary Education

VAC	Violence against children
VfM	Value for Money
WASH	Water and Sanitation for Health
WPM	Words per Minute

Project Abbreviations

The following abbreviations are used for project organisations in tables in this report:

BRAC	BRAC
Camfd	Campaign for Female Education
ChFnd	ChildFund
Eco	Eco Fuel
HPA	Health Poverty Action
ICL	I Choose Life
LCDK	Leonard Cheshire Development Kenya
LCSU	Cheshire Services Uganda
Link	Link Community Development International
Mercy	Mercy Corps
Oppty	Opportunity International
PEAS	Promoting Equality in African Schools
RV	Raising Voices
Red	Red Een Kind
TfAC	Theatre for a Change
Varkey	Varkey Foundation
VSO	Voluntary Services Organisation

Country Abbreviations

The following abbreviations are used for countries in tables in this report:

Afg	Afghanistan
Eth	Ethiopia
Gha	Ghana
Mal	Malawi
Moz	Mozambique
Rwa	Rwanda
Sou	South Sudan
Tan	Tanzania

Contents

Executive Summary

Introduction to the GEC

In 2012, the Department for International Development (DFID) launched the £355 million Girls' Education Challenge Fund (GEC). The GEC sets an ambitious target of reaching one million marginalised girls[1] by the time its first phase ends in April 2017[2]. The Business Case[3] for the GEC recognised that there was a lack of robust evidence about the benefits of focusing on girls' education. At the time, DFID, other donors and policy-makers did not know enough about how and why girls were marginalised in terms of their education and how best to intervene to bring about significant changes in the lives of marginalised girls. This was the underlying rationale for a fund that challenged the market to identify the causes of educational marginalisation, propose effective strategies for improving education outcomes for girls and rigorously collect evidence to prove and explain what worked well, why, for whom and under what types of circumstances.

DFID appointed Coffey, in partnership with RTI International and ORB, as the Evaluation Manager (EM) of the GEC. The EM is responsible for independently evaluating the overall effectiveness and impact of each funding window. The EM closely collaborates with the GEC Fund Manager (FM) to support projects in collecting data in line with the programme's evaluation requirements, and in reporting results with a maximum level of consistency across the fund.

The Innovation Window

The Innovation Window (IW) is one of three funding windows. The other windows are the Step Change Window (SCW) and the Strategic Partnerships Window (SPW).

Nineteen projects were awarded funding of up to £2 million per project through the GEC Innovation Window (IW) aimed at testing and piloting new approaches to enable marginalised girls to achieve education outcomes that improve their life chances. Projects operate in 12 countries: Afghanistan, Ethiopia, Ghana, Kenya, Malawi, Mozambique, Nepal, Rwanda, South Sudan, Tanzania, Uganda and Zambia. They are delivering holistic approaches that aim to address multiple barriers to girls' education at the level of the individual girl, the household, the community, and the school. The GEC programme ends in April 2017, with individual projects' contracts ending at various points between early 2017 and April 2017.

Purpose of the midline evaluation report

This midline evaluation report follows the IW Baseline Report that the EM published in January 2015. The EM will complete its endline evaluation of the IW later in 2017. This evaluation covers the first two years of the projects' three-year implementation period in the first phase of the GEC. The purpose of this midline evaluation report is to provide reliable evidence of the programme's impact on being-in-school and learning outcomes, effectiveness and sustainability that DFID, the FM and projects can use to inform further development of activities funded by the GEC – in particular, the next phase of the GEC (an additional four years are planned after the current phase finishes in 2017[4]). This report should also generate transferable learning for a wider audience including donor agencies, governments of GEC countries and other policy-makers.

Evaluation approach

As the EM for the IW, we assess the overall impact of projects on targeted girls in treatment communities. In contrast with the Step Change Window evaluation design, the IW evaluation design relies solely on evidence collected and reported by IW projects. We therefore review and carry out a meta-analysis of IW reports, datasets and outcome spreadsheets submitted by IW projects. The process adopted aims to synthesise the evidence provided by projects, in order to report on evaluation findings at the IW-level across all 19 projects. Our approach

[1] Girls' Education Challenge: http://devtracker.dfid.gov.uk/projects/GB-1-202372
[2] Girls' Education Challenge: http://devtracker.dfid.gov.uk/projects/GB-1-202372
[3] GEC Business Case v.3, September 2011
[4] GEC Business Case v.3, September 2011

also involves drawing on relevant secondary data and literature to help triangulate our analysis or to allow us to explore our findings in more depth.

Key findings

Reach and equity

The majority of IW projects (13 out of 19) have succeeded in reaching their target number of learning beneficiaries, and another six projects are on track to reaching their target numbers by endline. Findings suggest that IW projects target girls who are disadvantaged across a variety of dimensions that differ across project areas. Some projects consider all girls in their project areas to be marginalised and as such target all girls who live in the intervention areas. Conversely, some projects apply a more detailed range of eligibility criteria to select girls in communities or within schools that they consider to be particularly marginalised. The variety of types of marginalisation and the diversity of reasons *why* girls are educationally marginalised implies that activities that aim to improve girls' learning have to be context-specific and tailored to girls' specific needs. We also find that some aspects of educational marginalisation are not gender-specific and preclude both boys as well as girls from achieving learning outcomes. Some IW projects are therefore implementing activities that address barriers to education that are common to girls and boys. Finally, the evidence suggests that non-GEC activities are taking place in some treatment and control areas and address similar educational barriers. This makes it more difficult to capture the effects of GEC statistically, both in terms of reach (as captured through exposure questions) and impact (in terms of girls going to school and learning).

Impact on learning

DFID's Annual Review of the GEC[5] reports that the IW did not meet its logframe target of 179,900 girls with improved learning outcomes. It achieved 76% of its midline target (136,954 girls with improved learning outcomes) – this includes both girls who met the set learning targets and those who outperformed their peers but did not meet learning targets. Among these 136,954 girls with improved learning outcomes, 74% of the girls came from six out of 15 projects[6]: ChildFund (Afghanistan), VSO (Nepal), Link (Ethiopia), ICL (Kenya), Raising Voices (Uganda) and Opportunity (Uganda). These project learning figures combine literacy and numeracy results.

Literacy

From the EM review of project midline evaluation findings (based on 16 projects having submitted midline literacy test scores for both treatment and control groups), we find that seven projects have shown a statistically significant improvement[7] in literacy compared to their control groups. For projects using comparable tests and units (10 out of 16 projects), the baseline-to-midline improvement amounted to 16 words per minute on average in treatment groups. However, the difference in changes in literacy scores from baseline to midline between treatment and control groups is relatively low. For projects which reported a statistically significant improvement in reading fluency compared to their control groups (5 out of these 10 projects using comparable tests and units), the improvement is 8 words per minute over and above the control group. Finally, for projects that implemented interventions with in-school and out-of-school girls, out-of-school girls' literacy scores showed greater improvement than the scores for in-school girls.

Numeracy

From the EM review of project midline evaluation findings (based on 16 projects having submitted midline numeracy test scores for both treatment and control groups), we find that five projects showed statistically significant differences in improvements in numeracy between girls in treatment groups and those in control groups. For projects implementing interventions with in-school and out-of-school girls, out-of-school girls' numeracy scores increased in treatment groups while dropping in control areas.

Impact on attendance

Based on project midline evaluation findings, attendance improved from baseline to midline. Across 13 projects reporting attendance data, the average improvement is seven percentage points (versus three percentage points in

[5] DFID (2017) GEC Annual Review Report.
[6] For two projects, findings were deemed inconclusive. One project's findings were not yet signed off and another was still undergoing review at the time of the Annual Review.
[7] That is, significantly different ($p<0.05$) from the improvement observed in control groups.

control groups). However, poor quality attendance data makes it difficult to produce reliable findings at midline. Of these 13 projects, data for five projects received an 'inconclusive' quality rating by the FM. Anecdotal evidence suggests that attendance rates may go down in some GEC projects as school attendance records become more accurate. In contrast, attendance data in control schools may remain inflated.

Effectiveness of IW projects' activities

From our synthesis of project midline evaluation findings, we find that poverty factors (namely the cost of schooling and domestic responsibilities) are still the primary barriers to girls' education at midline across IW projects. Reducing the cost of education seemed to have led to an increase in attendance, but there is little evidence of effects on learning outcomes as a result at this stage. Evidence shows that school-related barriers have been reduced since baseline through better school facilities and improved pedagogy among teachers by the 18 projects tackling these issues. On-the-job training of teachers (mentoring, performance monitoring, and feedback) has been most successful in increasing learning outcomes. Interventions that are associated with barriers caused by girls' aspirations and decision-making ability, such as tutoring clubs and mentoring activities, have had positive impacts on either attendance or learning. Violence has proven a difficult barrier to address. Evidence shows a lessening of in-school violence (in the form of corporal punishment and peer harassment), as well as a general increase in school safety. However, projects have had no conclusive impact on harassment by teachers.

Innovation

IW projects have been innovative in two ways by: (1) using existing resources and the immediate environment in an innovative manner (e.g. forming partnerships with local organisations, adapting skills training to issues faced by marginalised girls, mobilising communities, using existing media and means of communication); and (2) providing new products or establishing new systems (implementing new technologies, designing new structures). Working with local organisations and/ or bringing in the expertise of specialised organisations has led to positive results, producing better designed interventions. By contrast, the effects of introducing new technologies as a way to enhance educational outcomes has been more limited, mainly because the implementation of a technology has not always sufficiently responded to specific needs and taken account of key contextual factors.

Sustainability

The IW exceeded its midline match funding target of £4.8m by generating match funding of £6.1m (a 27 percent over-achievement). Sustainability strategies for many projects seem to be primarily based on a continuation of initial stakeholder engagement strategies for project implementation. Few projects were able to demonstrate a sufficient understanding of the key drivers and barriers as a basis for developing strategies to sustain the most impactful, effective and critical approaches. At this stage in the life of the programme, with a few exceptions, the evidence available suggests that many project activities will not be scaled up or sustained by the end of the programme in April 2017.

Key conclusions

After two years of implementation, barriers to girls' education have reduced, but this has not systematically led to significant improvements in learning for all projects at this stage. The fact that some projects are not focused enough on barriers that are most critical to girls' learning is a possible explanation for this.

Projects have adopted approaches involving multiple types of interventions tackling the barriers to education that marginalised girls face. However, it is not clear from the evidence how or why projects prioritised the types of barriers they focused on (and invested varying amounts of their budgets to address). An evidence-based understanding of which barriers affect girls' education outcomes the most is not evident in many Projects Midline Evaluation Reports.

We recognise that across such a diverse portfolio of projects there are many factors (related to both project design and implementation factors) that could potentially explain why projects have been effective or not. Project interventions may be taking too long to have a visible impact on learning outcomes in the time available. However, projects that have not had an impact at midline may be lacking the focus needed to impact on the biggest education constraints that their target groups face. It is difficult to conclude the extent to which this has influenced the effectiveness of projects without more evidence related to their implementation, but the lack of prioritisation when it comes to choosing which barriers to tackle is a possible contributing factor.

Furthermore, we find that IW projects that demonstrate an impact on learning are the projects which have chosen to address the most basic and pressing issues faced by girls, parents or teachers. For instance, projects' evidence shows that learning improvements are primarily the result of girls benefiting from an increased volume of instructional hours, with teachers equipped with concrete teaching strategies.

There is little evidence of projects joining up and coordinating with other actors within the education sector and across other sectors. Projects which did proved more successful.

We find that well-designed approaches involving multiple types of interventions can be an appropriate way of intervening to improve girls' education because barriers to girls' education are multidimensional and often intersect with different themes and sectors. Projects that set out to improve girls' learning through different entry points by joining up with a range of different actors have proven more successful. However, after two years of implementation, there is little evidence that many projects have mapped the landscapes in which they work to identify with which actors they could coordinate and collaborate.

Projects that fully understand and are sensitive to the local context have proven to be more effective and impactful than those that have not been able to sufficiently tailor their designs.

Many IW projects have used interventions and designs that have been tried before in another country or elsewhere in the same country. Using evidence and lessons learned from what has worked before is a good starting point when designing projects. However, project designs need to be grounded in an in-depth understanding of the local context at institutional and social levels. Those projects that evidently knew their local context and understood what would work, how and why seemed to have had a greater effect on the barriers they set out to address. Some projects seeking to adapt models to a new local context sometimes struggled to tailor them to the social, economic and institutional needs of the education systems in which they were operating.

Projects have responded in different ways to complex and at times conflicting design requirements for the IW.

At the start of the programme, IW projects were tasked to test and pilot new approaches enabling marginalised girls to improve their education that if worked well could be replicated and scaled up in sustainable ways[8]. However, similar to SCW projects, IW projects were required to demonstrate tangible improvements in learning results by the end of the programme, across smaller populations, with smaller budgets. IW projects responded to this by selecting their target populations in different ways, depending on which IW imperative(s) they chose to respond to. Projects made trade-offs between innovating and trying new approaches, the number of girls that they reach and the degree to which the girls targeted are marginalised compared to others in their communities.

Projects that targeted smaller numbers of specific groups of girls had a better understanding of those groups and as a result seem to have been more effective than projects that took a general approach to targeting.

IW target populations are very heterogeneous. Some projects have effectively tested new approaches with small and targeted groups of marginalised girls, while other projects attempted to reach out to a larger number of girls, sometimes through activities that had not yet been tested at scale in terms of their effectiveness. Some projects have been effective while reaching larger number of girls, but we find that projects working with smaller number of girls have been more successful at improving learning outcomes across the IW, possibly because their interventions were better tailored to the specific groups they were targeting. The IW as a funding mechanism was better suited to funding organisations that already had expertise and experience of: working with certain groups of girls (e.g. projects focusing on girls with disabilities); implementing specific innovative interventions or processes (e.g. projects using technology in the classroom); working in specific areas (e.g. projects using networks of local organisations); and/ or working with an intervention model they knew how to adapt to new or changing conditions.

Projects have struggled with the consequences of targeting girls over boys and have not been able to fully demonstrate how different factors affect girls' learning compared to boys' learning.

Some communities and children have expressed resentment and frustration to projects, as girls and boys were receiving unequal benefits at school for things like after-school clubs or snacks. After complaints that girls' education was being improved at the expense of boys' education, some projects have modified their intervention designs to benefit boys as well as girls in contexts where both sexes are equally marginalised. From their Midline

[8] GEC Business Case v.3, September 2011

Reports, it is not evident that projects have conducted gender analysis of the pathways through which specific types of barriers have stronger effects on girls' education compared to boys' education. The definition of marginalisation was therefore rarely a gendered definition across IW projects, especially as some projects' eligibility criteria have led to some girls receiving support while other, less marginalised girls were left out of the project's scope. Furthermore, very few projects reported changes in gender disparity between boys and girls in terms of their learning or attendance outcomes. As a result, it is not clear what type of interventions are most effective in improving girls' learning outcomes compared to boys or improving the quality of education for both boys and girls.

Projects' sustainability strategies seem to be progressing too late and are overly reliant on untested assumptions about the capacity of groups and organisations to sustain key activities.

Government engagement has proved to be a frustrating process for projects, particularly when the sustainability of project activities or benefits is dependent on government funding or government adopting their approaches. It is clear that projects are at varying stages of developing, kick-starting and progressing their sustainability plans. In the absence of government support, sustainability strategies are dependent on schools and local community groups to continue supporting and delivering project activities after the end of the project. There is though little explanation about how and why they would do this once the formal or informal support infrastructure provided by the project and GEC funding has stopped completely or reduced significantly. IW projects have effectively levered in additional investment. However, on the whole this additional investment seems to be committed to delivering current activities and there is little to suggest that these commitments will be maintained beyond the end of the programme. Overall, there is little reported evidence to suggest that by the end of the IW in April 2017, many project activities will be ready to be scaled up or sustained.

Some projects and external evaluators have struggled with rigorous impact evaluation requirements and have not always been able to produce good quality qualitative analysis of the effectiveness of different types of interventions.

The GEC's Evaluation Strategy requires a particularly rigorous approach to evaluation and data collection. This approach has added value and has shown that large-scale data collection (including standardised learning tests) across 19 projects operating in 12 different countries[9] is possible. However, at midline, the GEC has demonstrated the limits to using experimental and quasi-experimental evaluation designs and longitudinal surveys in contexts marked by insecurity and instability, natural disasters, and migration – especially where both projects and external evaluators have relatively little experience or capacity in this type of evaluation. As a result the design, conduct and quality assurance of project impact evaluations has required a large investment of time and resources by DFID, the FM, EM and projects. Furthermore, the quality of data has at times been compromised by capacity constraints and the conditions in which projects operate.

Future evaluation designs should take into account that it is very difficult to draw general conclusions about the effectiveness of multi-country programmes in which each project targets a distinct population and context with a distinctive theory of change. To produce sufficiently meaningful learning about what works in a specific context requires a clear understanding of intervention mechanisms and their specific theories of change at the project level.

The level of rigour required to implement counterfactual approaches to impact evaluation in these contexts requires projects and their external evaluators to have high levels of expertise and experience to deliver them effectively. This has proved a challenge. Some projects have also struggled to produce good quality qualitative analysis to explain how and why their projects work and which types of intervention work best to improve girls' learning outcomes in a particular context.

[9] The GEC process review (Coffey (2015), GEC Process Review Report) reported that the GEC had accomplished its objective of embedding robust M&E in a complex, large-scale, multi-country, multi-window programme.

1 Introduction

1.1 Background to the GEC Innovation Window

1.1.1 Context and rationale

Changes in the global problems affecting the education of marginalised girls

Every child has the right to basic education. Educating girls, especially to secondary level, delivers significant economic, health and social benefits to the girls themselves, their families and the wider community. Girls who complete secondary school tend to have fewer children over the course of their lives, higher wages, and a higher life expectancy compared with girls who have only completed primary school.[10] A recent report by the Education Commission suggests that one US dollar invested in an additional year of schooling in low-income countries, particularly for girls, creates earnings and health benefits of USD 10, and around one-third of the decrease in adult mortality since 1970 comes from improvements in the education of girls and young women.[11]

From the outset of the Girls' Education Challenge (GEC) Fund in 2012, DFID was working towards the Millennium Development Goals (MDGs) and the international targets agreed by the United Nations (UN) to halve world poverty by 2015. Progress on girls' education was critical to the achievement of MDGs 2[12] and 3[13], which specifically relate to universal primary education and gender equality. By the time that the final Education for All (EFA) Global Monitoring Report (2000-2015) was published more girls were in school, stayed there longer, and learned more while they were there[14].

The last decade has seen the world approaching universal primary education coverage with a majority of children, both boys and girls, entering primary education in most countries around the world. Although primary school enrolments for girls have improved along with boys, school completion rates remain equally low for both boys and girls. Around 263 million children and young people were estimated as being out of school by the end of 2014 – this includes 61 million children of primary school age (6-11 years), 60 million adolescent children of lower secondary school age (12-14 years) and 142 million children of upper secondary school age (15-17 years)[15]. In secondary school, the differences between boys' and girls' participation rates are significant. Large disparities exist within countries, with poor rural girls experiencing worse educational outcomes, even at the primary school level.

Improved access to education has not resulted in improvements in learning for many children. Levels of learning remain appallingly low, even for those enrolled in school[16] - approximately 250 million children cannot read, write or do basic maths, including more than 130 million children who do not have basic skills, despite being enrolled in primary school. While significant challenges persist in terms of access to education, global development organisations recognise that improvements in the quality of learning in schools are urgently needed. The Sustainable Development Goals (SDGs) explicitly recognise the need to address not only persisting gaps in access, but also gaps in the equity, inclusivity and quality of education worldwide[17].

It is estimated[18] that over 36 percent of children who are out of school (28 million of primary school age) live in areas of conflict – this includes countries targeted by the GEC's Innovation Window projects such as Afghanistan, Kenya and South Sudan. In fragile and conflict-affected states and in crisis situations the provision of basic education services becomes difficult or impossible.

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[10] United Nations Girls' Education Initiative (2014): *Accelerating Transition of Girls to Secondary Education: A Call for Action.* Discussion Paper, United Nations Children's Fund (UNICEF), New York, published online at: http://www.ungei.org/resources/files/2014-04-GPE-UNGEI-Accelerating-Secondary-Education-Girls.pdf.
[11] The International Commission on Financing Global Education Opportunity (2016): *The Learning Generation. Investing in education for a changing world*. Available at: http://report.educationcommission.org/wp-content/uploads/2016/09/Learning_Generation_Full_Report.pdf.
[12] Goal 2: *Achieve universal primary education*; Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.
[13] Goal 3: *Promote gender equality and empower women*; Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015.
[14] EFA (2015), 'Global Monitoring Report: Education for All 2000-2015, Achievements and Challenges', UNESCO.
[15] UIS and GEM (2016), 'Leaving no one behind: How far on the way to universal primary and secondary education? Policy paper 27 /Fact Sheet 37. Paris: Global Education Monitoring Report'.
[16] UNESCO (2014), 'Teaching and Learning: achieving quality for all'. EFA Global Monitoring Report, Paris: UNESCO.
[17] United Nations Economic and Social Council (2016): Progress towards the sustainable development goals. Report of the secretary-general. E/2016/75, available at http://www.un.org/ga/search/view_doc.asp?symbol=E/2016/75&Lang=E.
[18] EFA (2015), 'Global Monitoring Report: Education for All 2000-2015, Achievements and Challenges', UNESCO.

Persistent under-investment in education

A key rationale[19] in 2011-2012 for DFID's investment in the GEC was that traditional Overseas Development Aid (ODA) to education had stagnated and, given the global financial situation and shifting development priorities, may even decline. Now, in 2016, under-investment in education persists. In 2013 aid data released by the OECD's Development Assistance Committee (DAC) showed a decline in education aid for the third consecutive year, with basic education suffering the greatest decline. While total ODA rose by 11 percent in 2013, aid to basic education declined by 7 percent[20]. The UN Educational Scientific and Cultural Organisation (UNESCO) estimates that more than double the current levels of spending would be required to achieve the SDG education targets by 2030. Education in humanitarian and conflict-affected settings continues to receive a relatively small proportion of the humanitarian budget (less than 2 percent), which prevents those children who are most marginalised from accessing a quality education.

Changes in the global policy response to education

The GEC Innovation Window Baseline Report[21] was published in 2015, which is also the year that marked the end of the MDGs, and the adoption of the SDGs. Goal 4 of the SDGs seeks to 'ensure inclusive and quality education for all and promote lifelong learning'. This goal recognises that major progress has been made towards increasing access to education at all levels and increasing enrolment rates in schools particularly for women and girls, but a greater focus is needed on the quality of education provided to enable effective learning outcomes to be achieved. Goal 5 aims to 'achieve gender equality and empower all women and girls'. This entails tackling discrimination against women and girls, including issues of: violence and sexual violence; early and forced child marriage; female genital mutilation; effective participation and equal opportunities for leadership at all levels of decision-making; and access to health services, in particular reproductive health services.

As well as changes in the global policy response to education, there have also been changes in global funding for education – for example, the Education Cannot Wait Fund. The Fund was launched in 2015 and is hosted by UNICEF. The Fund responds directly to the SDG commitment of achieving a quality education for all that leaves nobody behind, and is the first global fund to prioritise education in humanitarian settings.

Extending DFID's Girls' Education Challenge Fund

The current GEC programme ends in April 2017, with individual projects' contracts ending at various points between early 2017 and April 2017. At the Girls' Education Forum in London in July 2016, DFID announced it would provide a further £100 million of funding to the GEC[22]. This funding will continue its support for: the one million marginalised girls supported by the GEC enabling them to progress, transition through school phases and complete a cycle of education; and to help an additional 175,000 of the poorest and most marginalised girls receive a quality education – the Leave No Girl Behind initiative[23]. This is a new initiative that will support:

- interventions providing literacy, numeracy and skills relevant for life and work to adolescent girls aged between 10 and 19 who have never attended or have already dropped out of school; and
- girls who are located in one of the countries where DFID works and who are highly marginalised – girls who experience complex marginalisation because of their circumstances, including orphans, married or young mothers, girls with a disability, nomadic girls, refugees, those from the poorest communities and those with no access to education.

1.1.2 GEC theory of change and assumptions

The EM produced a high level Theory of Change (ToC) for the GEC as part of the GEC Evaluation Strategy[24] produced in 2013. This theory of change and DFID's Business Case for the GEC assumes that there are educational barriers that affect boys and girls, but that girls face a number of additional, gender-specific challenges

[19] DFID (2012), Girls' Education Challenge, Business Case Version 4; London: DFID.
[20] Steer and Smith (2015): "It's time to Reverse Declining ODA to Education", Brookings, published online at: https://www.brookings.edu/2015/01/12/its-time-to-reverse-declining-oda-to-education.
[21] Coffey (2015) 'Baseline Report – Innovation Window' https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/425338/innovation-window-Baseline-Report-fulla2.pdf.
[22] For more details see DFID's press release on the extension of the GEC, at: https://www.gov.uk/government/news/britain-to-help-175000-girls-in-worlds-poorest-countries-get-an-education.
[23] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/559123/leave-no-girl-behind.pdf.
[24] Coffey (March 2013), Annex A in the 'GEC Evaluation Strategy'.

which put them at a disadvantage in comparison with boys. The ToC for the GEC Evaluation Strategy that shows the links between different types of barriers and the GEC's outcomes is presented in Annex A.2.

The overarching ToC sets out the problems and barriers that hinder girls from enrolling, attending and learning in school. Problems identified include: economic barriers such as school fees, opportunity costs, and the cost of school materials; social and cultural barriers such as restrictive views about girls' education and the role of women and girls; educational barriers such as a lack of female teachers and poor teaching; logistical barriers such as lack of appropriate school facilities and distance to school; and institutional or political barriers such as lack of equity in public service provision, or a lack of influence of and accountability to marginalised groups.

Through the challenge fund design, the GEC encouraged organisations to develop their own theories of change and intervention mechanisms to address (some of) these barriers in specific contexts and for specific populations of marginalised girls.

The ToC assumes that by tackling these barriers, projects will help to improve girls' enrolment, attendance, retention and learning in school and contribute to an overall impact of improved life chances for marginalised girls.

1.1.3 Summary of IW projects and interventions

Nineteen projects were awarded funding of up to £2 million per project through the GEC Innovation Window (IW) aimed at testing and piloting new approaches to enabling marginalised girls to achieve education outcomes that improve their life chances. Projects operate in Afghanistan, Ethiopia, Ghana, Kenya, Malawi, Mozambique, Nepal, Rwanda, South Sudan, Tanzania, Uganda, and Zambia.

At design stage, all 19 projects developed holistic theories of change for their interventions. Those interventions aimed to address multiple barriers to girls' education at the level of the individual girl, the household, the community, and the school. Some projects also aimed to improve school governance aspects related to girls' education.

Projects tackle these barriers through a wide range of interventions. As shown in Table 1, **projects carry out economic interventions** to offset the cost of education (e.g. income-generating activities, in-kind support or loans); **run activities to improve school infrastructure and resources** (e.g. improving classrooms, providing textbooks and materials, improving sanitation facilities, incorporating technology into the classroom, etc.); **provide teacher training and support** (e.g. in literacy and numeracy, inclusive classroom strategies, or gender-sensitive pedagogy); **work with communities** (e.g. through media campaigns, cooperation with parent and women's groups, engagement of faith leaders, etc.); **provide extra-curricular or non-formal education** (e.g. tutoring clubs, vocational training, mentoring, etc.); and **strengthen school governance and management structures**.

In addition, some projects carry out additional **activities to empower girls** and raise their self-esteem (e.g. creating safe spaces for girls to express themselves, running role model or mentoring programmes, and promoting girls' participation) , **tackle marginalisation** (e.g. by addressing barriers related to disability, or issues of cultural or linguistic exclusion), and **reduce violence** in school or the community.

An overview of the activities that each project is delivering is provided in Annex E. A discussion of each project's target group(s) and the extent to which these have been reached at midline can be found in Section 3.1.1.

Table 1: Overview of IW project interventions

	Eco	PEAS	Oppty	Viva	RV	LCSU	LCDK	ICL	Link	HPA	Red	BRAC	VSO	Camfd	TfAC	Varkey	VSO	Mercy	ChFnd
	Uganda						Kenya		Eth	Rwa	Sou	Tan	Moz	Zam	Mal	Gha	Nepal		Afgh
ECONOMIC	Economic interventions offsetting the cost of education: Bursaries, Cash Transfers, Income-generating activities, In-kind support (school kits, menstrual supplies), Loans and savings.																		
	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓		✓	✦		✓	✓	✓
INFRASTRUCTURE & RESOURCES	Infrastructure and resources for schooling: School and classroom building/ improvement; Technology in classroom; Textbooks & Learning materials; Toilettes & WASH facilities.																		
		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓		✓		✓	
TEACHER TRAINING	Teacher training and support: Formal pre-service teacher training; Gender responsive pedagogy; Inclusive classroom strategies; Literacy and numeracy; Peer support and mentoring; Skills training.																		
		✓		✓	✓	✓	✓	✓	✓		✦	✓	✓	✓	✓	✓	✓		✓
COMMUNITY BASED	Community-based interventions: Adult literacy; Community gatherings; Household-level visits and support; Media (radio, TV, advertising); Parents' and women's groups; Working with faith groups and traditional leaders; Working with men and boys.																		
		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✦	✓	✓
EXTRA-CURRICULAR & NON-FORMAL EDUCATION	Extra-curricular activity & non-formal education: Life skills (incl. SRH); mentoring (e.g. peer support); mixed sex or boys' clubs; non-formal / alternative education; tutoring (e.g. homework clubs); vocational training & economic empowerment.																		
	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓	✓	✓
SCHOOL MANAGEMENT & GOVERNANCE	School management and governance interventions: Community and private schooling provision; Technology for school management; Working with local or national education authorities; Working with SMCs, PTAs and other stakeholders.																		
		✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓	✓
EMPOWERMENT & SELF-ESTEEM	Empowerment and self-esteem: Activities that promote girls' voice and participation; Mentoring; Role models (older girls, female teachers, parents); Safe spaces.																		
		✓	✓	✓	✓	✓			✦		✓	✓	✓		✓	✓	✓	✦	✓
MARGINALISATION-RELATED	Marginalisation-related interventions: Interventions in remote or nomadic locations; Interventions addressing cultural/ linguistic exclusion; Interventions addressing disability Interventions with other marginalised groups.																		
	✦	✓		✓		✓	✓	✓			✓	✦			✓			✓	✓
VIOLENCE-RELATED	Violence-related interventions: Addressing abuse from adults in charge; Addressing child marriage and FGM; Addressing corporal punishment; Addressing peer violence Child protection policies development in schools.																		
		✓		✦	✓				✓		✓		✓	✓	✓	✦	✦		✓

Note: ✓ indicates that an intervention of this type is at the core of the project's intervention strategy. ✦ indicates that an intervention of this type is used by the project, but is not a core activity.

As part of the challenge fund design, each project delivers its own project and maintains relationships with local, regional and national education authorities. Cooperation between projects working in the same country or region is not an inherent component in the GEC. As demonstrated in Table 1, most IW projects combine a range of intervention types, all taking a 'holistic' approach. Differences in intervention approaches do not show at this high level, but only emerge when looking at the specific activities that projects are running (see Figure 1 in Annex C).

The fact that projects roll out different intervention types in the same communities makes it difficult to distinguish the effectiveness of specific interventions using quantitative methods, because we are not able to isolate their effect from the contribution of other interventions. For a detailed discussion of methodological limitations, please refer to Section 2.2.3.

1.2 Governance, purpose and scope of this evaluation

1.2.1 Governance of this evaluation

In 2012 DFID appointed Coffey, in partnership with RTI International and ORB as the Evaluation Manager (EM) of the GEC. We are responsible for designing and implementing the GEC monitoring and evaluation (M&E) framework to assess the effectiveness and impact of the programme as a whole. We also generate and share lessons learned to inform the ongoing design and development of the GEC programme and wider DFID programming. Annex B provides an overview of the roles and responsibilities of the different EM consortium partners.

We closely collaborate with the GEC Fund Manager (FM) (a consortium led by PwC) to support projects in collecting data in line with the evaluation requirements, and in reporting results with a maximum level of consistency across the fund. The FM has played a key role in developing M&E processes and requirements at the project level, and in managing relationships with projects. Annex B shows the M&E activities carried out by the FM in the GEC.

The 19 projects funded through the IW have been responsible for developing their own project-level M&E frameworks. They have each been required to contract an external evaluator who collects data and assesses their progress and performance independently at project level. The FM and EM reviewed and quality assured the research instruments and reports produced by projects and their external evaluators. Our intention, as the EM for the GEC was to aggregate project datasets for meta-analysis. Unfortunately, due to the average poor quality of project data and the insufficient level of consistency across them (inconsistent surveys, inconsistent sampling designs, inconsistent learning tests, etc.) this has not been possible either at baseline or at midline.

1.2.2 Purpose of the GEC midline evaluation

The overarching purpose of the GEC Evaluation Strategy is to produce reliable evidence of the programme's effectiveness and impacts that DFID, the FM and projects can use to inform improvements during the programme's lifetime, as well as future programme design. In particular, it is expected that DFID, the FM and projects will use the findings and lessons learned from this evaluation to inform the successor programme to the GEC and its new Leave No Girl Behind window that DFID announced in July 2016.

DFID always envisaged that the programme evaluation should generate transferable lessons about what works, what does not, where and why in delivering girls' education outcomes for a wider audience including its partners, governments of GEC countries, and other policy-makers. The GEC Knowledge Management Working Group led by the FM has a key role in identifying and facilitating opportunities to communicate and disseminate learning across the GEC programme and beyond to inform wider policy-making and programming. As the EM we are a member of this Working Group. In addition, the EM is currently developing, with DFID, a specific dissemination plan for the findings of this midline evaluation that will target key education partners of DFID, including UNICEF, UNGEI, USAID, GPE, UNESCO and the World Bank. Activities in the dissemination plan will be delivered in early to mid 2017 following the publication of this report.

This midline evaluation also serves an important accountability purpose by providing reliable information about the effectiveness and impact of the IW projects two years into the three-year implementation period. It follows the baseline research that was conducted in 2013/14, and precedes the programme endline evaluation that will be completed by December 2017.

1.2.3 Scope of the GEC IW midline evaluation

The midline evaluation aims to answer the following questions:

- What are IW project's target populations? To what extent have target girls and their communities been reached by their interventions? (Section 3.1)
- To what extent has the IW improved girls' enrolment, attendance, retention and learning? (Sections 3.2 and 3.3)
- To what extent are IW interventions addressing key barriers to girls' education and with what effect? What type of intervention works, in what context, and for whom? (Section 3.4)
- In what ways have IW projects demonstrated innovation and with what effects? (Section 3.5)
- How scalable and sustainable are the activities funded by the IW? (Section 3.6)

The GEC midline evaluation focuses on **changes in outcomes** (i.e. attendance and learning) **and intermediary outcomes** (i.e. barriers to girls' education). Reporting on outputs and the progress in the delivery of GEC activities is covered through the FM's performance reporting, and is not within the scope of this evaluation. A discussion of progress against output targets can be found in each project's midline evaluation report.

The GEC midline evaluation focuses on answering questions about the effectiveness and impact of the IW projects, but also explores the value for money (VfM) delivered by projects (Section 3.7), as well as the potential sustainability of the activities delivered – our assessments of VfM and sustainability rely on data and information provided in project evaluation reports.

1.2.4 Structure of the IW report

The report is organised around the midline evaluation questions.

Section 2 presents the approach and methodological challenges to synthesising and aggregating findings from the midline research conducted by IW projects and further analysis undertaken by the EM using the project datasets.

Section 3 focuses on key findings, i.e. the extent to which target girls and their communities have been reached by IW interventions, the extent to which IW projects improved girls' enrolment, attendance, retention and learning, and which type of intervention works, in what context, and for whom.

Section 4 and Section 5 present our conclusions and recommendations for the different audiences of this evaluation.

A list of annexes can be found at the end of this report, and comprises:

- **Annex A.1:** GEC Evaluation Manager Terms of Reference;
- **Annex A.2:** GEC Theory of Change;
- **Annex B:** Roles and responsibilities for the GEC Evaluation;
- **Annex C:** IW projects' intervention mapping;
- **Annex D:** Tables;
- **Annex E:** Overview of IW projects;
- **Annex F:** IW projects' effectiveness analysis; and
- **Annex G:** List of references.

2 Evaluation Approach and Methodology

2.1 Overview of the GEC Innovation Window evaluation strategy

For the Innovation Window (IW), the GEC Evaluation Strategy focuses on **project-led evaluation activities**.

Projects assess the impact of their interventions on their specific target groups (see Section 3.1.1 for an overview of each project's specific target groups). They generate findings about what works, what does not, and why at project level, draw lessons learned about their theories of change, and reflect on possible adaptation and improvements to their project design. The main data sources comprise (detailed below): Projects' Midline Evaluation Reports, Projects' Outcome Spreadsheets, and Projects' Datasets.

The **Evaluation Manager** (EM) conducts a meta-analysis of project-level evaluation findings to assess the overall impact of the GEC IW interventions on girls targeted by IW projects. We produce lessons learned to inform GEC and wider DFID programming, and to build the wider knowledge base around what works in girls' education.

2.1.1 Project evaluation design and changes since baseline

IW projects assess the impact of their interventions on their specific target groups (see Section 3.1 for an overview of each project's specific target groups). The project-led evaluations include the following activities:

- Commissioning an **independent evaluator** to collect data at baseline, midline and endline and produce an evaluation report at each stage that complies with a template provided by the FM and EM.
- Collecting a combination of quantitative and qualitative data in **intervention and control communities** (or schools), including a longitudinal household survey. IW projects are encouraged to use the standardised survey template provided by the EM to collect data consistently across the window.
- Testing **literacy and numeracy** using standardised international tests, and conducting appropriate statistical analysis to report on changes in learning outcomes.
- Reporting of evaluation findings using the **GEC reporting templates** (report and outcome spreadsheet).

Support provided to IW projects at midline

The FM supports projects with their evaluation and monitoring systems on a continuous basis (refer to Annex B for Roles and responsibilities). The FM advises projects on changes to their evaluation design, and the adequacy of learning tests and analytical models. The FM also leads the quality assurance of projects' research instruments and evaluation reports.

The EM supported projects as follows at midline:

- Provided projects with a household survey template for midline, as well as a guidance package explaining how the survey changed between baseline and midline, discussing good practice in supervising fieldwork processes, advising on the process for dealing with survey attrition, and for merging and submitting household survey datasets to the FM and EM;
- Shared this guidance with projects and their external evaluators through webinars hosted by the FM;
- Developed a detailed project midline evaluation report template; and
- Reviewed and quality-assured projects' midline evaluation reports and research instruments jointly with the FM.

Changes since baseline and data quality at midline

Following the GEC baseline research, all IW projects have continued to sample control areas and carry out comparative evaluations of their projects, using either a randomised control trial or a quasi-experimental design (Table 2). Three projects experienced difficulties matching observations from baseline and midline data, and replaced the original cohort study with a cross-sectional evaluation. Another three projects found their baseline data to be unfit for use for a longitudinal evaluation, and had to carry out a horizontal comparison of treatment and control groups at midline, without comparison of these groups to baseline.

Table 2: IW projects' evaluation designs and data quality at midline

Project evaluation designs and data quality at midline	Eco	PEAS	Oppty	Viva	RV	LCSU	LCDK	ICL	Link	HPA	Red	BRAC	VSO	Camfd	TfAC	Varkey	VSO	Mercy	ChFnd
	Uganda						Kenya		Eth	Rwa	Sou	Tan	Moz	Zam	Mal	Gha	Nepal		Afgh
Evaluation designs	QE	QE	QE	QE	QE	QE	QE	QE	QE	QE	QE	RCT	QE	QE	QE	RCT	QE	QE	QE
Control group data	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	⃠	⃠
Data quality for literacy and numeracy scores[25]	1	2	3	3	2	2	3	3	3	2	3	2	3	1	2	3	3	1	2
Data quality for attendance rates	1	2	2	3	3	1	2	2	2	1	2	1	2	3	2	2	2	1	1

RCT	Project conducts a Randomised Control Trial.
QE	Project uses a quasi-experimental evaluation design.
	Purple shaded boxes represent the projects that have changed their design since baseline – moving from a cohort study to a cross-sectional evaluation.
	Orange shaded boxes represent the projects that have changed their design since baseline – either dropping baseline data and conducting a horizontal comparison of midline treatment and control groups, or dropping control groups and conducting a comparison of midline treatment with baseline treatment.
Red – Green	The red to green cells indicate the quality of the data for learning scores and attendance rates. Dark green is high quality data, while dark red indicates that the data is inconclusive/ has major issues.

LCDK (Kenya) experienced some issues with the representativeness of the project baseline sample, after the project realised that the sample was not reflective of the beneficiary population. It was agreed that a sample of direct learning beneficiaries would be re-baselined at midline. As difference-in-difference analysis and baseline-midline comparison was not feasible, the project carried out a horizontal comparison of the midline intervention and control groups. ICL (Kenya) and PEAS (Uganda) switched from a cohort study to a cross-sectional evaluation due to high attrition issues.

Some projects modified their data collection design but did not collect data which allow the EM to draw conclusions regarding impact. For instance, LCSU (Uganda) switched from using a cohort study to a cross-sectional evaluation due to difficulties in re-contacting the girls from baseline. The majority of girls had moved to other locations, belonged to other schools that were not sampled, or just were not available at the time of midline data collection. As such, the majority of girls participating at midline were substituted girls, however it was determined that the baseline and midline samples were still representative and fit for longitudinal comparison. Similarly, Mercy Corps (Nepal) conducted horizontal comparisons at midline since their baseline data, collected by different external evaluators, showed many errors and inconsistencies. This resulted in overall poor data quality for this project.

Finally, five projects which kept their original evaluation design did not provide data of good enough quality to support a measure of impact. This concerns HPA (Rwanda)[26], BRAC (Tanzania)[27] and ChildFund (Afghanistan) for attendance data, and Camfed (Zambia) for learning data, collected using a national-level test that was not adapted to the level of their beneficiaries. As for Eco Fuel (Uganda), both learning and attendance data did not reach basic quality standards[28].

2.1.2 The EM evaluation approach

As the EM for the IW, we assess the overall impact of projects on targeted girls in treatment communities[29]. In contrast with the Step Change Window evaluation design, the IW evaluation design relies solely on IW projects' information.

We therefore review and carry out a **meta-analysis of IW reports, datasets and outcome spreadsheets** submitted by IW projects. The process adopted aims to synthesise the evidence provided by projects, in order to report on evaluation findings at the IW-level across all 19 projects.

[25] Data quality defined on a scale from 1 to 3: 1 – Inconclusive/ major issues; 2 – Partially conclusive; 3 – Conclusive. This relates to whether the tests were correctly administered and the data clearly entered/ labelled as submitted to the FM and the EM. As such, the data might be of adequate quality and still prevent any conclusion on impact if other issues arise (sampling, statistical analysis, etc.).
[26] No spot checks conducted on attendance data.
[27] No spot checks conducted on attendance data. Attendance records are from self-reported data.
[28] The outcome spreadsheet reports learning data for girls by grade, however it is unclear how Eco Fuel (Uganda) identified the grades at baseline, since beneficiary girls were mostly out-of-school girls to be re-enrolled in school. Attrition is not documented.
[29] Refer to project targeting (Section 3.1.1).

Our approach also involves assessing the quality of the data and findings against quality assurance criteria defined by individual projects, the FM and the EM (Figure 1).

The step-by-step process adopted is as follows:

- Mapping of project documents and data available (Project Midline Evaluation Reports, Outcome Spreadsheets, Project Datasets, but also Project Baseline Reports, Project Proposals and Project M&E Frameworks);
- Systematically extracting the data and analysis from project documents, including Project Datasets;
- Ensuring the consistency and quality of reported findings;
- Synthesising the evidence base provided by projects at midline; and
- Answering the midline evaluation questions using IW projects' evidence base.

Figure 1: Meta-analysis and synthesis approach

Approach to synthesising IW projects' findings

Given the multiple sources of information available and the fact that evidence presented by projects is drawn from their own research, there is no definitive source of data about project target groups, educational outcomes, barriers or intervention effectiveness. **This report therefore does not aim to provide a replacement midline for IW projects but aims to present a synthesis of the evidence base provided by projects at midline**.

It is also important to note that projects did not conduct (/report conducting) any process evaluation in relation to their implementation processes. As such, we rely solely on logframe results to assess whether a project implemented the activities it had planned at design stage, which is rather limiting in order to assess whether the (lack of) effectiveness of projects relates to their design and/or to implementation factors.

We recognise that across such a diverse portfolio of projects ***there are many factors (related to both project design and implementation factors) that could potentially explain why projects have been effective or not****. Where relevant, we have indicated the limitations of our interpretation of projects' findings.*

Our quality assurance role as the EM therefore focuses on (1) considering the comparability of measurement tools used across projects and consistency in reported measures across Project Midline Evaluation Reports, Outcome Spreadsheets and Project Datasets, and (2) assessing the quality of the data collected and reported. Table 3 below provides the list of consistency and quality criteria used to synthesize the IW project data and analysis.

Table 3: Criteria used for the synthesis

Consistency criteria	Quality criteria
✓ Comparable measurement tools (e.g. learning assessments) ✓ Comparable indexes compiled by projects for reporting on educational outcomes	✓ Defined by each individual projects' external evaluator ✓ Quality Assurance conducted by the EM and the FM prior to Project Midline Report approval

Despite the triangulation of findings across the different sources available and the EM reanalysis of projects' data, there are limitations to the EM's interpretation of the synthesised data (outlined in Section 2.4).

Changes to the evaluation approach at midline

The EM's evaluation approach has largely remained unchanged since baseline. We have used the same type of documents and data information provided by projects. However, the data extraction processes were adjusted to incorporate lessons learned from baseline, such as the use of a 'data extraction' template focusing on:

- Changes – What has changed since baseline in terms of barriers to girls' education? What has not changed?
- Linkages to interventions – As a result of which project intervention? How? Where? For whom?
- Effects – With what effect on education outcomes (attendance, learning)? For which sub-groups?
- Other contributing factors – What other non-GEC activities have happened and with what effect on barriers? Is there evidence of coping strategies and/ or enabling contexts?
- Micro-level – Is there any story of interest, individual pathways that can shed light to how change happens for girls and their communities?

Our extraction process at midline therefore focused on measuring changes against baseline, rather than establishing outcome levels and barriers present in the area as we did at baseline.

2.2 Methodology and data sources

A key difference between the SCW and IW Midline Evaluation Reports should be outlined for the reader. As the IW Evaluation Strategy mainly uses **project-led evaluation activities** to assess project's effectiveness and impact, the results presented in this report may read in a more positive light than those presented in the SCW Midline Evaluation Report, which relies on **independent, EM-led evaluation activities**. Where needed, we acknowledge IW projects' reporting style and positive bias towards the effectiveness of their interventions.

2.2.1 Project information

The GEC Evaluation Strategy required all IW projects to carry out independent qualitative and quantitative research at baseline (2013/14), midline (2015/16) and endline (planned in 2016/2017).

All 19 projects' external evaluators conducted surveys using questionnaires and sampling frameworks that were reviewed by the EM and the FM during the development of M&E Frameworks at baseline, and as part of the preparation for midline. All 19 projects' external evaluators tested the literacy and numeracy skills of girls in target communities. In addition, projects conducted qualitative research and were encouraged to draw on existing sources of secondary data.

***As IW projects could develop their own qualitative research designs, they may have taken different approaches with regards to qualitative sampling or the development of interview guides**. While quantitative data (Project Datasets) were shared with the EM along with Projects Midline Evaluation Reports, it was not required from projects to submit their qualitative data to the FM. As a result, the qualitative findings presented in this report are based solely on IW projects' analysis, as presented in their reports.*

Data sources

The evidence gathered by projects through their midline research is documented in three different formats, as detailed below.

- **Project Midline Evaluation Reports** present evidence, key findings, and lessons learned based on the data analysis led by projects and by their independent evaluator/ affiliated researchers. The Project Midline Evaluation Reports focus on testing a project's theory of change and assumptions about target groups, educational outcomes and barriers to education;
- **Outcome Spreadsheets** are used by projects to report the midline levels of attendance and learning, which are the key outcomes for the GEC. In addition, learning outcomes are those on which Payment-by-Results (PbR) payments are based; and
- **Project Datasets** compiling the raw data from the household surveys and/ or in-school surveys. The EM has carried out an independent analysis of this data for a selected number of key variables where the relevant information was available, documented and comparable. This "reanalysis" aims to cross-check and verify the figures and findings presented by the projects in their midline evaluation reports (refer to Annex D).

The three sources of information have different strengths and weaknesses.

Project Midline Evaluation Reports are based on the midline research and analysis conducted by the projects and their independent evaluators, who had all committed in their M&E Frameworks to achieving high levels of representativeness, statistical power and analytical quality. However, reporting against indicators was not standard across projects and project reports did not always reflect the range of indicators of interest for GEC midline analysis at the programme level, and as such was **not always in a standard format** or **disaggregated by sub-groups** of interest.

At midline, the EM also noticed that it was at times unclear whether project staff had been involved in the writing of the findings, rather than this being solely the external evaluator's independent work. In preparation for endline, the EM and the FM have worked on a revised version of the template for Project Endline Evaluation Reports which now includes clear sections which have to be filled/ written by the external evaluator or by the project staff. A formal management response, in a separate annex to the report, will also be asked from the project staff at endline.

Since this may compromise the independence of the midline findings presented in this report, we chose to ***discard narratives around findings in Project Midline Evaluation Reports which were not supported by an objective presentation of quantitative and qualitative data.***

Outcome Spreadsheets are a way to consistently capture key outcome data and report on progress against targets for learning and attendance for all projects. The Outcome Spreadsheets have the advantage of providing a relatively standard format and allowing disaggregation by grade, subject to some variation in the learning assessment tools used.

Project Datasets were submitted by projects along with their Midline Evaluation Reports, which allowed the EM to conduct a reanalysis of the findings presented in project reports (refer to Table 2 in Annex D). The EM chose to **focus the reanalysis on barrier levels and exposure to interventions**, to avoid a duplication with the reanalysis conducted by the FM on learning variables. The process followed by the FM to reanalyse learning outcomes was shared with the EM for verification for each project, along with a summary of key issues found in the datasets.

Generally, the quality of the data was variable. For a majority of projects, the identification of key variables was not possible and entailed further limitations in conducting the reanalysis of project data at the level of sub-groups (e.g. rural/urban populations, disabled groups, socio-economically disadvantaged groups) or for specific barriers (e.g. poverty, violence, early marriage). Box 1 below outlines the key limitations in using project datasets to assess IW projects' effectiveness and impact at the programme level.

Box 1: Limitations to the reanalysis of Project Datasets and meta-analysis

As the EM for the GEC, we had originally planned to aggregate project datasets for meta-analysis. Unfortunately, due to the average poor quality of project data and the insufficient level of consistency across them (type of survey, sampling designs, learning tests), this has not been possible either at baseline or at midline.

Project data received by the EM varied in terms of the types of surveys administered, number of surveys administered, survey questions asked, type of respondents, data quality, and merging. In order to carry out cross-project comparison on key indicators, the EM chose to focus on the reanalysis of household surveys. It was selected because it was the most commonly administered survey among projects and included several variables that were commonly coded to measure barrier levels and exposure.

Key challenges

Baseline and midline data not merged

One of the most common problems encountered during the project data reanalysis was that baseline and midline datasets had not been merged. Due to inconsistent variable names, dataset structures and/or observation identification numbers, the EM was unable to undertake merging of baseline and midline survey data. As a result, where projects had not merged their datasets, only midline datasets were analysed.

One of the above-mentioned issues found in project data that prevented the EM from being able to merge the baseline and midline datasets was inconsistency of observation identification numbers. In some projects, it was found that the IDs used at midline were inconsistent with those that were included in the baseline data. Without consistent ID numbers, matching observations from baseline and midline surveys was not possible.

School-level and household-level data not linked

Another major limitation was that school-level data and household-level data were most often not merged and frequently identifiers that could be used to combine the datasets were either missing or unreliable. This had a number of causes. Several implementing partners collected these datasets separately and did not attempt to record identifying information that would make it possible to identify what school the girls in a household attended. In other cases, because of problems with data collection or record keeping, these identifiers were either missing from the datasets or different series of identifiers were used in different databases so they could not be matched. As a result, it was not possible to conduct a higher level analysis of how barriers impacted learning outcomes, which were recorded at school level. Though we were able to use data collected in household surveys on the primary caregiver's perceptions of school quality, this prevented us from incorporating more detailed data on school quality from school surveys into our household-level reanalysis.

No control group

Analysis of project data was further limited in some cases where no control group data had been collected or included. In this case, the EM was unable to compare barrier and exposure levels of the treatment group with any comparison group, and as such could not ascertain whether the project had had any impact on those variables.

Inconsistent coding

Variables that related to barriers addressed by projects or associated activities were sometimes found to use response options that were inconsistent and incomparable with response options used by other projects and in the EM template household survey. These variables were therefore unfit for comparative analytics and excluded from the reanalysis.

Measuring changes in barriers to girls' education and assessing the effectiveness of interventions

In this report, we present a synthesis of projects' findings about barriers and assess the extent to which these findings are being supported by projects' midline evidence.

To further their understanding of marginalisation, and develop their interventions, projects identified specific barriers at baseline that were assumed to drive educational marginalisation in the target areas. While some of these barriers are structural or environmental and beyond the projects' direct control (such as the occurrence of

droughts or political violence), others may be tackled through targeted interventions and support (such as negative attitudes towards girls' education or a lack of adequate sanitation facilities in schools).

It is important to note that this report presents evidence collected by projects of the **most reported barriers** *perceived* to be preventing girls from attending school and learning. As such, barriers may not be *actual* barriers (e.g. fear that violence may occur on the way to school *versus* reports of violence occurring on the way to school) but the influence of these **barriers, either actual or perceived**, is assumed here to similarly prevent girls from attending school and learning. Where information is provided by projects, we distinguish between the two types of barriers and discuss the potential effects on girls' access to education.

Following the data extraction at baseline, barriers were categorised across the key thematic areas (see Key themes below) that emerged from the baseline reporting of IW projects. At midline, similar categories are used to ensure continuity of reporting (refer to Figure 1 in Annex D). Some sub-barriers, absent at baseline, have been found by projects at midline and added to the list of barriers.

We follow a three-staged approach to assessing the most and least prevalent barriers, and the effectiveness of interventions. These three stages are described in Table 4.

1. The metrics used to assess the prevalence of barriers are derived from the ways in which projects present their findings, e.g. whether the reported barriers are deemed as prevalent or not prevalent by the projects. Across the IW and for each of the identified barriers, we discuss the **number of projects who have reported the existence of the specified barrier** in their target areas. The ranking of reported barriers (from most reported to least reported) gives the relative prevalence of some barriers compared to other barriers across IW projects[30]. See further methodological discussion in Annex D.
2. The second stage involves a project-by-project discussion of findings in order to assess whether the evidence was found, not found or not reported by projects for the specified barriers that projects' activities aimed to tackle between baseline and midline. Barriers have either lessened, not changed or worsened since baseline, and some barriers were discovered at midline. The extent to which barriers have changed (e.g. %/ 'volume' of change) could not always be assessed. Therefore, changes in barriers should be interpreted more as a '**direction of change**', either positive, neutral or negative.
3. Finally, the third stage relates to assessing the **effectiveness of interventions**. Similarly, evidence is derived from projects' findings, e.g. whether the interventions are deemed effective or not by the projects. We indicate the origin of the findings by referring to individual Project Midline Evaluation Reports and we chose to express reservations on these findings wherever projects themselves have expressed these reservations, or when outcome data could not validate projects' claims. Where possible, we triangulated projects' findings using the existing literature relating to intervention effectiveness for girls' education (refer to Annex F).

[30] It is important to note that the data collected by projects is focused on their **target groups** rather than the general population or communities in which their target groups live. This means that unless projects have undertaken a population study as part of their baseline/ midline research, those barriers that are most reported may not necessarily be the most prevalent in the communities in which they are working.

Table 4: Assessing the prevalence of barriers and measuring the effectiveness of interventions

1. Metrics used to assess the prevalence of barriers	2. Type of evidence in relation to changes in barriers	3. Type of evidence in relation to intervention effectiveness
Identification of barriers: Based on the barriers mentioned in Project Proposals and Project M&E Frameworks. **Levels of barriers:** Each of the categories covers specific barriers that may lie at the individual level (i.e. when related to the girls' aspirations, health or ability), within the family (i.e. in the case of household economics and decision-making), within the community (i.e. in the case of attitudes or social exclusion), or at the institutional level (e.g. the school). **Source of evidence:** Barriers may be reported by girls, parents, community leaders, school staff or other key informants. **Prevalence of barriers:** Based on the number of projects reporting the existence of a barrier in Project Midline Evaluation Reports. The ranking of reported barriers (from most reported to least reported) gives the relative prevalence of some barriers compared to other barriers across IW projects.	**Barriers which have lessened or been removed since baseline:** Barriers found at baseline for which evidence shows that their influence is lesser or none at midline. Barriers lessened or removed are marked with '▲'. **Barriers which have not changed since baseline:** Barriers found at baseline for which evidence shows that their influence has not changed at midline. Barriers with no change are marked with '≡'. **Barriers which have worsened since baseline:** Barriers found at baseline for which evidence shows that their influence has worsened at midline. Barriers which have worsened are marked with '▼'. **Barriers discovered at midline:** New barriers found at midline or barriers only discovered by projects at midline. Barriers found at midline only are marked with '!'. **Barrier for which evidence is inconclusive or not available:** Evidence around barrier not reported/ discussed/ measured by the project at midline. Inconclusive or missing evidence is marked with '⃠'. **Not applicable:** Barriers not reported by projects at baseline and midline are marked in **Grey**.	**Intervention improved access to school (enrolment, retention and/ or attendance):** Midline evidence indicates that the intervention had a substantial effect on improving access to school. Interventions which improved access to school are marked with '**A**'. **Intervention improved learning (literacy and/ or numeracy):** Midline evidence indicates that the intervention had a substantial effect on improving learning. Interventions which improved learning are marked with '**L**'. **Intervention with limited or no effect on educational outcomes:** Midline evidence indicates that the intervention had a limited or no effect on improving educational outcomes. Interventions with limited or no effect are marked with '≡'. **Intervention with negative impact on educational outcomes:** Midline evidence indicates that the intervention had a negative effect on educational outcomes. Interventions with negative effects are marked with '▼'. **Intervention for which evidence is inconclusive or not available:** Evidence around intervention effectiveness not reported/ discussed/ measured by the project at midline. Inconclusive or missing evidence is marked with '⃠'. **Not applicable:** Interventions not included in project designs are marked in **Grey**.

Key themes

At baseline, key thematic areas emerged from the analysis of barriers to girls' education. At midline, the same categories are used to ensure continuity of reporting.

Barriers were categorised into two groups, proximal and indirect barriers (refer to Figure 1 and Figure 2 in Annex D). This categorisation allows us to reflect the differences between barriers that have a direct influence on girls' enrolment, retention, attendance and learning (proximal barriers) and barriers which influence the pathways that cause girls to remain out-of-school, to leave school, attend irregularly or learn poorly (indirect barriers).

The above themes are discussed in Section 3.4 using the definitions below:

- **Poverty:** We define poverty as being multidimensional, that is, not solely related to income or consumption levels. It is also assumed that the linkages between poverty and girls' education differ according to the different understandings of the term 'poverty'. Evidence suggests that it is the material dimension of poverty which, to a large extent, drives the household decision-making process with regards to sending an additional child to school. Consequently, where not otherwise specified, 'poverty' refers to objective poverty understood as 'material deprivation'.

- **Disability:** Our definition of disability is largely driven by projects' definition of disability. Several projects had a particular focus on disability, and collected data on this issue. LCSU (Uganda) defines disability as including mobility, hearing, visual, learning impairments. The project also includes some of the least recognised impairments that affect learning. These include girls with autistic spectrum disorders, attention hyperactivity disorder, dyslexia, dyscalculia among others. LCDK (Kenya) defines disability as physical disability, intellectual disability, speech impairment, hearing impairment and visual impairment. As the EM, we chose to discuss disability in relation to its effects on girls' access to schools and learning (negative attitudes in community, inaccessible school environment, lack of assistance at school, inadequate teaching skills, etc.).
- **Early Marriage:** We investigate early marriage from the perspective of girls' household attitudes towards early marriage and perceptions about the frequency of early marriage within the community. We specifically focus on the relationship between attitudes to marriage and competing outcomes such as child employment and engagement with education. Several projects had a particular focus on early marriage, and collected data on this issue (refer to Section 3.4, Girls' aspirations).
- **Violence:** Violence includes all reports of violence by respondents, within the household, school or community. This area includes various types of violence that requires separate discussions: corporal punishment, sexual assault, domestic violence, fear of violence, etc. Where information is available in Project Midline Evaluation Reports, violence is reported and discussed under the most appropriate sub-category. Several projects collected data on this issue (refer to Section 3.4, Violence).

2.2.2 Secondary data

The interpretation of projects' midline findings was supported by the use of secondary data. More specifically, we gathered the following information: (1) international sources of secondary data relating to girls' literacy, attendance and enrolment (Table 5); and (2) existing literature about barriers to girls' education and education interventions' effectiveness (refer to Annex F for a list of references).

Table 5: Secondary data sources used

Educational outcomes
Learning To analyse the change in EGRA scores from baseline to midline across the 19 projects, we used the benchmark proposed by Abadzi[31], which provides the **minimum average word per minute in a given grade**. We also used the evidence highlighted by the author that below 45 words per minute, a student is not able to understand a simple paragraph of text. **National female literacy rates** for 2009-2013 measure the percentage of population aged 15–24 years who can both read and write with understanding a short simple statement on his/her everyday life. This data is provided by UNICEF[32], which retrieves the information from UNESCO Institute for Statistics.
Attendance **Primary school female national net attendance ratio** for 2009-2013 refers to the number of children attending primary school[33] who are of official primary school age, expressed as a percentage of the total number of children of official primary school age. This data are provided by UNICEF, which uses data from Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS) and other national household surveys.
Enrolment **Primary school female national net enrolment ratio** for 2009-2013 refers to the number of children enrolled in primary school who are of official primary school age, expressed as a percentage of the total number of children of official primary school age. To provide these data, UNICEF[34] uses Institute for Statistics (UIS) estimates based on administrative data from national Education Management Information Systems (EMIS) and UN population estimates.

[31] Abadzi, H. (2011), Reading Fluency Measurements in EFA FTI Partner Countries: Outcomes and Improvement Prospects, GPE Working Paper Series on Learning, No. 1, Education for All Fast Track Initiative Secretariat, World Bank, Washington DC.
[32] UNICEF, State of the World's Children 2015. Country Statistical Information. http://data.unicef.org/resources/the-state-of-the-worlds-children-report-2015-statistical-tables/ Accessed 5 October 2016.
[33] Attendance is defined in a different way in the GEC (percentage of school days attended by enrolled girls). As such, the UNICEF definition is closer to the definition of an enrolment rate.
[34] Ibid.

2.2.3 Triangulation and synthesis process

As described in Section 2.1, this report draws evidence from a range of different data sources to answer the GEC evaluation questions. Table 6 presents a simplified version of the GEC evaluation framework, showing how methods and data sources have been triangulated to answer each evaluation question.

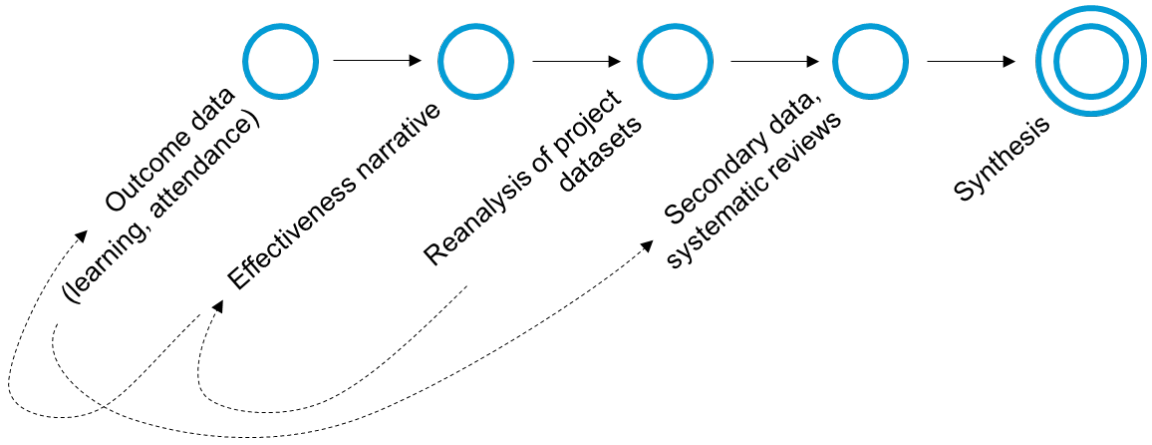
Table 6: Overview of the streams of evidence used to inform the analysis presented in this report

GEC Evaluation Questions	Project information			Secondary data
	Project Midline Report	Project Dataset	Outcome spread-sheet	
Relevance: To what extent has the GEC reached marginalised girls? (Section 3.1)	✓			✓
Impact: What impact has the GEC had on marginalised girls' learning? (Section 3.2)			✓	✓
Impact: What impact has the GEC had on enabling marginalised girls to be in school? (Section 3.3)			✓	✓
Effectiveness: What has worked, why and with what effects? (Section 3.4)	✓	✓		✓
Innovation: In what ways have IW projects demonstrated innovation? (Section 3.5)	✓	✓		✓
Sustainability: How scalable and sustainable are the activities funded by the GEC? (Section 3.6)	✓			✓
Efficiency: To what extent does the GEC represent good value for money? (Section 3.7)	✓			

The GEC evaluation was **not designed to test and compare the effectiveness of specific intervention types**, or to assess what type of intervention is most effective. Projects carry out a bundle of activities in their intervention areas and it is not possible to single out the impact of one specific intervention using quantitative methods.

Therefore, using an **iterative approach** to synthesising evidence (Figure 2), we draw upon the analysis presented in the projects' midline evaluation reports, the outcome data on learning, attendance and enrolment, the findings from projects' dataset reanalysis and the secondary data available – to unpack how and why changes have (or have not) come about, and how well different types of interventions have delivered.

Figure 2: Triangulation and synthesis process



2.3 Methodological limitations and mitigation strategies

2.3.1 Limitations of the EM's midline approach and mitigation strategies

Challenges identified by the EM while extracting, analysing and synthesising the data are listed below:

- **Significant gaps and quality issues with the evidence base:** significant gaps and weaknesses in the evidence available arose in relation to some of the key GEC outcomes. Missing and/or unreported figures, contradictory values reported in the Project Midline Evaluation Reports and other inconsistencies in Project Datasets (refer to Annex D) were addressed where possible by triangulating the available evidence (e.g. Outcome Spreadsheets).
- **Contradictions arising from a diversity of data sources:** the diversity of data sources and different types of data reported by projects (quantitative versus qualitative data, population of reference, reporting style, etc.) led to difficulties in synthesising the findings that emerged into a coherent narrative. However the structured and systematic approach used for the analysis, triangulation and synthesis of the data helped resolve contradictions arising from the analysis by providing a transparent means of explaining why they occurred.
- **Synthesis challenges:** a carefully structured approach to the synthesis of project findings was adopted in order to mitigate against the effects of different types of bias. Challenges identified include:
    - potential **sources of heterogeneity**, including project research methodologies, the narrative versus quantitative nature of the synthesis, degrees of data validity, cultural sensitivities and contextual factors; and
    - the identification of **adverse synthesis effects** – effects that were identified as very likely to have been lost during the synthesis process; for example, if two equally valid sources of data (e.g. Project Midline Report findings and Outcome Spreadsheets) presented different findings, there was a tendency to conclude that this was an inconclusive finding, leading the EM to investigate a third source (e.g. Project Dataset).

We do not expect these limitations to the approach to significantly compromise the quality of the synthesis of the midline findings, or its capacity to add significant value to DFID's understanding of how and to what extent the GEC IW projects managed to improve girls' educational outcomes.

2.3.2 Limitations of the IW projects' midline research

At midline, IW projects faced issues with timing, attrition, inaccurate learning assessment scores, poor management of cohort re-contacting protocols, matching of cohort observations across baseline and midline, the comparability of treatment and control groups, and the usability of school register data. This section summarises some of the key challenges and mitigation strategies reported by projects in their midline evaluation reports.

Project data collection timings and length of implementation

The period between IW projects' inception phases during which baseline research was conducted and projects' data collection at midline is not uniform across projects – implying that projects measure impact over longer or shorter periods of implementation.

Table 7 shows that there are discrepancies across projects. For instance, TfAC (Malawi) only had 26 months to implement activities between their baseline and midline research, while LCSU (Uganda) and VSO (Nepal) were delivering interventions for a period of 34 months before conducting their midline data collection, which is an additional eight months of implementation. This suggests that **impacts on girls' educational outcomes may not have been realised at the time of midline data collection** for some projects. At endline, this limitation will still be present since IW projects will have had different implementation periods overall, ranging from a total of 31 months for Raising Voices (Uganda) and VSO (Mozambique)[35] to 41 months for VSO (Nepal). It is also important to note that endline research will occur less than a year after midline data collection for most projects.

[35] Projects not continuing activities after midline.

Table 7: Project data collection timings

Project data collection timings	Eco	PEAS	Oppty	Viva	RV	LCSU	LCDK	ICL	Link	HPA	Red	BRAC	VSO	Camfed	TfaC	Varkey	Mercy	VSO	ChFnd
	Uganda						Kenya		Eth	Rwa	Sou	Tan	Moz	Zam	Mal	Gha	Nepal		Afgh.
Baseline to Midline (in months[1])	30	32	32	33	31	34	32	32	31	28	27	31	31	31	26	27	27	34	32
Midline to Endline (in months[1])	7	6	6	6	n/a[2]	6	8	6	4	12	8	7	n/a[2]	6	8	7	8	7	6
Overall length of implementation	**37**	**38**	**38**	**39**	**31**	**40**	**40**	**38**	**35**	**40**	**35**	**38**	**31**	**37**	**34**	**34**	**35**	**41**	**38**

[1] Only complete months (-/+5 days) have been counted
[2] These two projects are not continuing activities after midline.

Attrition

As shown in Table 8, attrition rates vary from 13 percent to 72 percent, with a number of projects experiencing **high attrition**. Detailed attrition data for treatment and control group are scarce across IW projects. For Viva (Uganda), the treatment group was easier to recontact with an attrition rate of 21 percent compared to the control group (48 percent attrition). These results are similar to Link (Ethiopia), where senior girls' attrition rate stands at 15 percent in the treatment group, and at 29 percent in the control group. By contrast, ICL (Kenya) does not find a significant difference (42 and 45 percent for treatment and control group respectively).

Table 8: Attrition rates among IW projects

Attrition rates	Eco	PEAS	Oppty	Viva	RV	LCSU	LCDK	ICL	Link	HPA	Red	BRAC	VSO	Camfd	TfAC	Varkey	VSO	Mercy	ChFnd
	Uganda						Kenya		Eth	Rwa	Sou	Tan	Moz	Zam	Mal	Gha	Nepal		Afgh
	n/a	63%[a]	n/a	21%[b]	42%	72%	n/a	42%[c]	n/a	17%	23%	23%	58%	27%	n/a	13%[d]	17%	n/a	60%

[a] Data for in-school girls only. For out-of-school girls, attrition rate is 79%.
[b] Data for treatment group only. For control group, attrition rate is 48%.
[c] Data for treatment group only. For control group, attrition rate is 29%.
[d] Data includes boys.

Due to insecurity in the Kunduz and Badakhshan regions, ChildFund (Afghanistan) was **unable to access remote, nomadic communities**. The project mitigated this problem by selecting sample villages in similar locations with the same number of schools as replacement sampling points. Red (South Sudan) struggled to re-contact their baseline cohort and found that a large number of **families in their cohort had migrated to avoid on-going internal conflict** across the country (refer to Section 3.4.2). Project staff invested a large number of resources to find cohort girls and travel to their new locations to survey them. For girls that they were unable to re-contact, the project was unable to draw a substitute sample, because of abnormally low enrolment in cohort grades caused by the insecurity in some project areas. Viva (Uganda) found that families in their treatment and control groups had migrated outside of the project areas because of increased housing rental costs due to inflation. The project used its community mentors to track most of the treatment cohort, but were less successful in regaining contact with the control group as they did not have a local contact person or reliable contact information.

Flooding, earthquakes and political strikes affected three target districts in the VSO (Nepal) project (refer to Section 3.4.2), lowering the number of districts where midline evaluation could be conducted. Replacement treatment and control schools were selected from two other districts targeted by the project, but this reduced the strength of the evaluation and the usability of longitudinal cohort tracking.

In an attempt to reduce student absenteeism and increase survey participation, Varkey (Ghana) provided schools with a list of students to be surveyed prior to the survey visit. Instead of increasing turnout in school, this had the opposite effect, as many parents suspected the survey teams were health practitioners who were coming to test Ebola vaccinations on their children. To resolve this, the project staff worked with head teachers and community announcers to inform households why they were visiting, and they managed to gradually improve turnout.

LCDK (Kenya), LCSU (Uganda), Mercy Corps (Nepal), PEAS (Uganda), ICL (Kenya), BRAC (Tanzania), and VSO (Mozambique) also struggled with higher than expected attrition rates. As a result, these projects may face greater

difficulty in demonstrating significant treatment effects at midline and endline[36]. Attrition presents a potential threat of biased results, if those who drop out of the study are characteristically different from those who remain.

Inaccurate learning assessment scores

PEAS (Uganda), HPA (Rwanda), Eco Fuel (Uganda), and VSO (Nepal) experienced issues with EGRA/EGMA test administration and incorrect data entry. Despite training, PEAS (Uganda) found error rates of about 66 percent in the administration of EGRA/EGMA testing. The project had to undertake on-going coaching of test administrators to reduce the inaccuracy of administration and/or test-marking, and were eventually successful in bringing error rates down to seven percent. HPA (Rwanda) found that some of the EGRA/EGMA data for both baseline and midline had been wrongly inputted months after midline data had been input into the system. To correct this large-scale error, project staff had to go through their paper files and re-enter all incorrect entries.

Poor management of re-contact protocols

PEAS (Uganda) found that enumerators did not follow re-contacting and replacement protocols. When visiting project schools, enumerators were often late and when they were not immediately able to identify the girls who were surveyed at baseline, they made substitutions right away from the class list. This was done without attempting to re-contact the cohort girls through other means, confirming whether re-contacted girls had been enrolled for at least three terms, confirming how long potential substitute girls had been enrolled and exposed to treatment, or following a random selection procedure to select replacement girls.

Inability to match midline and baseline observations

At midline, some projects, including VSO (Mozambique), Mercy Corps (Nepal), Eco Fuel (Uganda), Varkey (Ghana), Raising Voices (Uganda), ChildFund (Afghanistan), and TfAC (Malawi), struggled to match midline observations with the data collected at baseline. This was largely due to **inconsistent coding or miscoding** of identifiers for girls and their households, failure to collect data on household location and contact information at baseline, or baseline identifiers being held by an external evaluator that no longer worked on the project. This caused delays in fieldwork as enumerators struggled to re-contact the right girls and households, as well as in data cleaning and processing. It also made the merging of baseline and midline datasets very difficult.

Changes in the target group of beneficiaries also led to projects' inability to match baseline and midline observations. BRAC (Tanzania) changed their target beneficiary group from baseline to midline, changing from girls in P5, P6, P7 and out-of-school to girls enrolled in P6 and out-of-school girls only. Because the baseline sample size for girls in P6 was not large enough, the project found that its baseline sample was unusable.

Issues with the control group

Several projects had issues with the usability of their control group samples. Link (Ethiopia) found that they had **treated some control schools**, training teachers in gender-sensitive teaching practices. LCSU (Uganda) found that the proximity of treatment and control areas had likely led to spill-over effects in the control area through the transfer of teachers. LCDK (Kenya) noted a disparity in the percentage of girls that were currently enrolled in school in treatment and control groups, with the control group having about half the number and percentage of enrolled girls in the sample as compared to the treatment group. Link (Ethiopia), LSCU (Uganda), and Viva's (Uganda) control samples were **compromised by other organisations working in project areas** (refer to Section 3.4.2). Finally, Viva (Uganda), HPA (Rwanda), ICL (Kenya), and Raising Voices (Uganda) struggled with **complaints from the control group** and even refusal to participate in the research without receiving any benefits.

Quality of school registry data

All IW projects struggled with the poor quality or availability of school registry data. Even though many projects conducted at least one spot check and head count to assess attendance in school, there were often no reliable class register to compare the head count with. As a result, the majority of reporting on improvements in attendance has been inconclusive (refer to Section 3.3).

Where we expect these limitations to significantly compromise the quality of the synthesis of the midline findings, we have indicated it in the key findings section (Section 3) and, in some cases, we chose not to present midline information of some projects.

[36] That is, significantly different ($p<0.05$) from the improvement observed in control groups.

3 Key Findings

3.1 To what extent has the IW reached marginalised girls?

At midline, the majority of projects have refined their understanding of the target groups they had set out to reach at baseline, and all projects have either reached their target number of learning beneficiaries or are on track to reach their targets by endline.

Across the IW and within each project, beneficiaries face considerable disadvantages of various types, which project interventions aim to reduce. Some projects consider all girls in their project areas to be marginalised and thus target all girls who live in the intervention areas. Conversely, some projects apply a more detailed range of eligibility criteria to select girls in communities or within schools that they consider to be particularly marginalised.

The variety of types of marginalisation and the diversity of reasons why girls are educationally marginalised implies that activities that aim at improving girls' learning have to be context-specific and tailored to girls' specific needs.

3.1.1 Who are IW projects targeting?

The GEC aims to "expand education opportunities to marginalised girls".[37] Its business case defined marginalised girls as "those girls of primary and secondary school age […] who have not been enrolled or have dropped out from school (whether living in slums, remote areas, ethnic minorities, girls with disabilities etc.) or are in danger of doing so."[38] Marginalisation was defined in terms of the education outcomes that DFID wanted the GEC to focus on.

DFID deliberately did not prescribe the type of factors that marginalised girls from education as there was a lack of evidence about what caused girls' marginalisation from education and these factors were likely to vary from one context to another. GEC applicants were encouraged to focus on the girls with the greatest education needs in their target communities, leaving it to them to explain how and why their target girls were marginalised from education.

Three broad categories of marginalisation criteria have been identified across the 19 IW projects, as listed below:

- **Educationally marginalised girls:** Projects which opted to define marginalised girls through the spectrum of educational marginalisation, e.g. out-of-school girls, girls at risk of dropping out, girls at risk of poor learning or poor attendance.
- **Geographically or socio-economically marginalised girls:** Projects which provided a range of socio-economic criteria to define marginalised girls, e.g. girls living in a slum or in a rural area, girls from displaced or migrant population groups, girls whose families are unable to meet basic needs or facing hunger, orphan girls, girls with disabilities, girls facing early marriage or a young pregnancy, girls living on the street or being forced into labour and – more broadly – any other definitions that fit the context where projects operate.
- **Combination of educational, geographic and socio-economic factors to identify marginalised girls:** Projects which identified marginalisation for their target group using multiple criteria or indexes.

At baseline, projects had selected educational or social groups that they would like to target through their interventions based on the different types of barriers that they anticipated would drive educational marginalisation in their target areas. Six of the 19 IW projects continued to target the same educational and social groups set out during the inception phase. Of the 13 projects for which target group characteristics shifted between baseline and midline, six projects removed at least one characteristic (e.g. targeting older, orphaned or out-of-school girls) and 12 added one or more characteristics to their target beneficiary profile. Table 9 provides an overview of the types of girls that each project is targeting, as stated by projects in their midline evaluation reports.

In addition to direct learning beneficiaries (girls, but also boys depending on the project), projects' interventions can also indirectly impact broader beneficiaries including other girls, boys, teachers and communities.

[37] https://www.gov.uk/girls-education-challenge#girls-education-challenge--the-portfolio-of-projects.
[38] DFID (2012), Girls' Education Challenge, Business Case Version 4, June 2012, p. 30.

Table 9: Project targeting – primary target group(s) by IW project

Midline project targeting	Projects targeting this group	Eco	PEAS	Oppty	VIva	RV	LCSU	LCDK	ICL	Link	HPA	Red	BRAC	VSO	Camfd	TfAC	Varkey	VSO	Mercy	ChFnd
		Uganda						Kenya		Eth	Rwa	Sou	Tan	Moz	Zam	Mal	Gha	Nepal		Afgh
School phase																				
Lower primary	12	✓		✦		✓	✓	✓		✓	✓	✓		✓	✦		✓			✓
Upper primary	16	✓	•	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		
Lower secondary	9		✓	✓	✓			✦	✓		✓		✓					✓	✓	
Upper secondary	4			✦				✦			✓								✓	
Older	3		✦		•						✓	•		✓	•					•
Social groups																				
Disabled girls	10	✦	✓		✓	✓	✓	✓		✓		✦	✓	✦						
Orphaned girls	5		✓		•				•				✓	✦	✓	✓				
Pastoralist girls	3								✓			✦								✓
Displaced girls	0																			
Remote girls (rural)	4		✓							✓				✓		✦				
Slum-dwellers	3	✓					✓		✓											
Other girls	3				✓[1]	✓[2]											✓			
Child labour	1				•														✓	
Poor/Hunger	12	✓	✓	✓	•		✓		✦	✓		✦	✓	✓	✓	✓		✓		
Death/ separation in family structure	2															✓		✓		
Affected by HIV/AIDS	0				•															
Young mothers	4				✓				✓							✦	✦			
Street children	0				•															
Educational groups																				
Out-of-school girls	14		✓		✓	✓	✓	✓	•		✓	✓	✓	✓		✓	✓	✓	✓	✓
Girls dropped out	15		✦		✓	✓	✦	✓	✦		✦	✓	✓	✓		✓	✓	✓	✓	✓
At risk of dropout	10			✦	✓		✦	✓		✓	✓	✓				✓		✓	✓	
Girls in-school	17	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

Key	
✓	**Target group reached**
✦	**Target group added and reached since baseline**
•	**Target group removed since baseline**
	Not applicable: Target groups not included in project design at baseline or midline are marked in **Grey**.
1.	Other girls defined as domestic workers
2.	Other girls defined as environmentally marginalised, including physical, sexual or emotional violence

School phase groups

Projects are targeting girls aged in the range of 5 to 19 years with a dominant focus on **primary school girls**. All IW projects, with the exception of Mercy Corps (Nepal) and PEAS (Uganda), are targeting girls in primary-level education. Four out of 19 projects target girls at upper secondary level. Three projects expanded the targeted school phases beyond those outlined at baseline into both lower primary and secondary levels. PEAS (Uganda) is targeting girls at secondary school level, but at baseline, the project also selected girls in Primary 7 (Grade 7) who had recently completed primary school, were eligible to enrol in secondary school the following year, and were living in the catchment areas for the treatment and control schools. At midline, this cohort group is now in Secondary 2 (Grade 9), and as such the sample group of beneficiaries no longer represents any girls from primary levels.

While at baseline, six projects found older girls (up to 22 years old) in their learning beneficiary groups, four of these projects did not observe girls in this age group in their samples at midline.

Educational situation

Almost all projects target in-school girls, except for ChildFund (Afghanistan), which is targeting out-of-school girls specifically. 14 projects are targeting both in-school and out-of-school girls. A further 4 projects are targeting only in-school girls. No projects have removed in-school girls from their target group of beneficiaries. ICL (Kenya) is the only project which has removed out-of-school girls from its learning beneficiary group; this was done because the project identified and enrolled the out-of-school girls found at baseline.

Girls who have dropped out and those who are at risk of dropping out are also an important focus for projects, with 15 out of the 19 projects targeting girls who have dropped out and ten out of 19 targeting girls who are at risk of dropping out. This reflects that some projects are focusing on improving enrolment and attendance while others focus more strongly on improving learning and retention in school. Further, more projects are targeting these types of girls at midline than were at baseline, with four projects having added girls that dropped out to their target group and two projects having added girls at risk of dropping out.

Social groups

IW projects target a range of social groups that they expect to face particular challenges to enrol and remain in school, and learn effectively. This includes girls reported as living in poverty (12 projects), orphans (five projects), girls with a disability (ten projects), girls from pastoralist communities (three projects), and girls living in remote or rural areas (four projects).

Five projects have added one or more social groups to their target beneficiary profile, as they found their interventions were able to benefit a more varied population of girls facing the associated barriers to education than initially intended.

Only two projects, Viva (Uganda) and ICL (Kenya) have removed social group characteristics from their target beneficiary profile. Most notably, Viva (Uganda) removed five social group types by midline. The project was targeting eight different social groups at baseline, by midline they have found that their project interventions have only feasibly been able to reach three of these eight different groups, including disabled girls, domestic workers, and young mothers.

3.1.2 How marginalised are the girls targeted through the IW?

IW projects use marginalisation criteria at different levels (community, school, household, girl) to select the girls they work with

Some projects target **all the girls who live in a community**, either because all the girls from the area are considered to be marginalised girls, or due to the nature of their interventions and the difficulty to exclude less marginalised girls from the activities carried out. For instance, Red (South Sudan) works with pastoralists in conflict areas, Mercy Corps (Nepal) intervenes in areas where ethnic minorities and caste issues have been evidenced, while ChildFund (Afghanistan) targets nomadic households – all of which are marginalisation criteria applied to the community as a whole. Similarly, one of the activities run by HPA (Rwanda) consists in building separate girls' sanitation facilities using ECOSAN composting toilets, and therefore directly benefits all the girls enrolled in target schools.

By contrast, other projects applied a more detailed range of **eligibility criteria** to select girls in communities or within schools. They assume that in the target areas, some girls are more marginalised than others. For instance, out-of-school girls and disabled girls receive particular attention from some projects. While Viva (Uganda) and ICL (Kenya) work specifically with out-of-school girls, HPA (Rwanda), BRAC (Tanzania), VSO (Mozambique) and VSO (Nepal) set up special tutoring sessions for this category of marginalised girls, in parallel to other interventions. With regards to girls with disabilities, two projects focus all of their interventions around this issue: LCSU (Uganda) organises special tutoring session for disabled girls while LCDK (Kenya) improves access to school through adapting facilities for girls with disabilities.

Poverty is also used as a criterion for selecting girls. On the one hand, VSO (Mozambique), Camfed (Zambia) and VSO (Nepal) include this factor in the checklist used for beneficiary selection. On the other hand, Opportunity

(Uganda) tackles the poverty criterion by offering school fee loans to poor self-employed parents (who self-select to apply and receive the loans after an assessment of household income)[39].

Specific, household- or girl-level targeting allows for a better understanding of marginalisation and girls' most pressing needs in terms of education

Unlike infrastructure improvement such as school renovation or teacher training, **some interventions can only reach a small number of direct learning beneficiaries**. Mentoring and tutoring proposed by VSO (Mozambique) for instance are only effective with small groups.

Furthermore, a project's impact on attendance and learning depends on its capacity to **select the girls who will benefit the most from the interventions**. Moreover, selecting girls using specific, household or girl-level criteria allows projects to design and implement interventions that are specifically targeting the needs of the girls they work with. For instance, ramps built in schools by LCDK (Kenya) are primarily beneficial to disabled girls; similarly, transportation provided by Eco Fuel (Uganda) is more beneficial for girls who live far away than for girls living closer to school. Finally, Opportunity (Uganda) determines the size of loans to parents through an assessment of the household's capacity to repay, therefore excluding the poorest households but ensuring that:

(1) the intervention targets the beneficiaries it has been designed to help (i.e. a group of self-employed parents in a specific financial situation); and

(2) the beneficiaries are receiving the type of support they need (i.e. loans they can repay).

As a result, depending on the social and economic context in which the projects operate, and depending on the nature of the intervention and the human and financial resources they have at their disposal, projects target their beneficiaries through various levels of selection. The different factors of marginalisation described in different contexts reflect DFID's approach to allow projects to define marginalisation as they see fit, and to identify contexts in which girls are marginalised from education.

Although it has not been demonstrated conclusively that the girls reached are systematically the *most* marginalised in their communities[40], they face considerable disadvantages.

Countries covered by IW projects are characterized by different degrees of educational marginalisation

Early pregnancy is one of the barriers to girls' education found across IW projects. In 2015, four out of 12 IW countries have an adolescent fertility rate above 100 births per 1,000 among 15-18 years-old women: Uganda (108.9), Tanzania (117.7), Mozambique (136.9) and Malawi (135.3). By contrast, in Rwanda, adolescent fertility rate is much lower (25.6) and closer to Europe and Central Asia's rate (17.2). Rwanda also has the highest proportion of female students in secondary school (64.3%) among IW countries.

Table 9 shows that the proportion of female students in secondary school in these countries with a high adolescent fertility rate (Uganda, Tanzania, Mozambique and Malawi) is close to 50%. This is relatively high compared to South Sudan and Afghanistan, which contrast with other IW countries with only 33.5% and 34.8% of female students enrolled in secondary school. Both South Sudan and Afghanistan are also ranked fairly low among IW countries with regards to youth literacy rate (15-24 years), which stands at 44.3% in South Sudan and 58.1% in Afghanistan.

Discrepancies between IW countries are important with regards to the proportion of teachers in primary education who are trained and the pupil/teacher ratio in primary education. More than 90% of teachers in IW countries are trained with basic skills, except for South Sudan and Ghana where the proportion is around a half. By contrast, the pupil/teacher ratio in primary schools is relatively high across the IW, since it lies between 40 and 60 in most IW countries, except in Ghana and Nepal where the ratios are 30.1 and 23.9 respectively, which is still above the European and Central Asian ratio (14.9) and may affect the quality of education.

[39] According to the project, "*loan sizes are decided based on the member's capacity to pay which is determined by an assessment of household income. This requirement automatically disqualifies food insecure households, who would likely lack the disposable income to make loan payments*".

[40] For a more in-depth discussion of this issue see the GEC Process Review. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/501596/Process-Review-Report.pdf (accessed 7 October 2016).

3.1.3 To what extent have communities been exposed to GEC interventions?

Thirteen of the 19 IW projects have succeeded in reaching their target number of learning beneficiaries[41] set out at baseline (Table 10). Of these, eight projects exceeded their target numbers, exceeding target numbers by 103 to 449 percent. Five projects, including PEAS (Uganda), Camfed (Zambia) and Link (Ethiopia), reported direct beneficiaries that were comprised only of in-school girls. ChildFund (Afghanistan) was the only project for which the beneficiaries reached were all out-of-school girls. For the remaining 13 projects that reported reaching both in-school and out-of-school girls, the number of in-school beneficiaries is much larger than those that are out-of-school (except Viva (Uganda)).

Table 10: Beneficiaries at midline and secondary data at country-level

Beneficiary type		Eco	PEAS	Oppty	Viva	RV	LCSU	LCDK	ICL	Link	HPA	Red	BRAC	VSO	Camfd	TfAC	Varkey	VSO	Mercy	ChFnd
		Uganda						Kenya		Eth	Rwa	Sou	Tan	Moz	Zam	Mal	Gha	Nepal		Afgh
Direct learning beneficiaries	Total project target	**15,058**	**7,000**	**18,011**	**4,720**	**17,280**	**1,182**	**2,050**	**9,170**	**77,642**	**18,285**	**2,816**	**15,618**	**7,353**	**6,967**	**9,040**	**3,047**	**1,653**	**6,793**	**1,200**
	Reached by midline	**15,058**	**4,924**	**14,220**	**3,245**	**17,280**	**2,024**	**2,355**	**9,170**	**51,801**	**18,781**	**4,722**	**9,950**	**5,965**	**6,967**	**9,000**	**3,667**	**7,429**	**8,000**	**1,405**
	In-school	15,058	4,924	14,220	1,138	17,280	1,400	1,832	8,170	51,801	17,791	3,722	8,000	5,525	6,967	6,750	3,567	7,056	7,000	
	Out-of-school				2,107		624	523	1,000		990	1,000	1,950	440		2,250	100	373	1,000	1,405
	% reached	100%	70%	79%	75%	100%	171%	115%	100%	67%	103%	168%	64%	81%	100%	100%	120%	449%	118%	117%
Teacher beneficiaries		1,070	353	433	440	3,360	2,195	600	692	3,886	280	108	650	234	775	5,009	233	158		
Broader community beneficiaries (adults and boys)		105,000		19,045	1,990	12,800	5,098	2,058	30,123	12,434	4,500	1,462	140,000	14,820	7,486	4,400	360	32,525		49
Secondary data at country-level																				
Adolescent fertility rate (births per 1,000 women ages 15-19) - 2015		108.9						90.2		56.6	25.6	63.4	117.7	136.9	87.8	135.3	66.1	71.3		71.2
Percentage of students in secondary general education who are female (%) - 2014		46.6[1]						48.9		48.1	63.8	33.5[3]	47.9[1]	48.7	48.6[1]	47.5	47.7	50.6		34.8
Pupil/teacher ratio in primary education - 2014		45.61						56.62		64.3	58.2	49.93	43.4	54.5	47.91	61.4	30.1	23.9		45.71
Percentage of teachers in primary education who are trained, both sexes (%) - 2014		94.8[3]						96.8[4]		95	95.2[1]	44[3]	99.9[1]	89.9	92.6[2]	90.8[1]	52.4	93.6		NA
Youth literacy rate (15-24 years) - 2015		87						85.9		69.5	85	44.3	87.3	76.7	91.5	75.1	90.6	89.9		58.1

Sources: The number of beneficiaries reached by midline is harvested from the FM's Midline M&E Tracker. Target numbers are harvested from Project Midline Evaluation Reports. Adolescent fertility rate is retrieved from United Nation Population Division (World Population Prospects). Percentage of students in secondary general education who are female, Pupil/teacher ratio in primary education, Percentage of trained teachers in primary school, and Youth literacy rate are harvested from UNESCO database.

Key: Darker blue indicates a high % of girls reached against project target. Lighter blue indicates that the project has not yet reached 100% of its target number of girls.

Notes: [1]Data from 2013. [2]Data from 2012. [3]Data from 2011. [4]Data from 2009.

[41] Learning beneficiaries are girls who have benefitted from GEC project interventions aimed at positively impacting their learning outcomes.

Projects that have succeeded in reaching their endline target number of beneficiaries have cited aspects of their projects that they believe have facilitated their outreach. One example is community outreach and involvement, which projects such as Varkey (Ghana) have reported helped identify out-of-school girls and increase re-enrolment.

Extra-curricular activities and use of local languages in conjunction with English are other activities that projects have cited as expanding their reach. For example, Varkey (Ghana) noted that facilitators and girls are more likely to share information and engage in open dialogue in after-school clubs than in formal settings.

Conflict and natural disasters are two reported difficulties that have prevented projects from maintaining project activities and reaching their target beneficiary groups. For example, Red (South Sudan) has experienced cross-border conflicts, intra-communal, inter-tribal and militia-based violence, which has led to a number of schools being shut down, project staff evacuation, and even killing of teachers and head teachers. TfAC (Malawi) has cited severe flooding in the Southern regions as one of the causes of drops in attendance at Girls' Clubs. Further details are given in Section 3.4.2.

Some projects appear to be lagging behind their target numbers

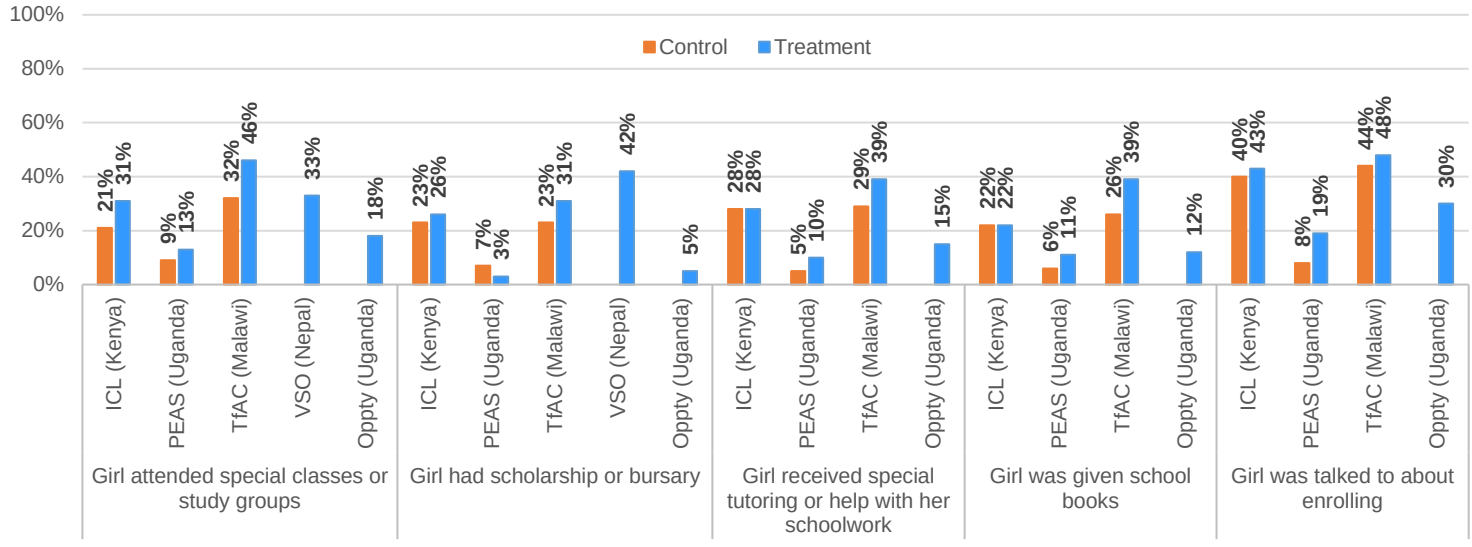
Project midline evaluation reports show that these projects continue to be on track to reach their targets by endline. For example, PEAS (Uganda) has not yet reached their target number of beneficiaries, however, as of February 2016, they had 28 schools in their network with a total capacity of 16,020 places in classrooms of which 50 percent are reserved for girls. Because 1,650 of these places will remain in the five PEAS non-GEC schools, the maximum number of school places available to girls in schools receiving GEC interventions is 6,360 in 2016. PEAS is planning to build further classroom spaces in 2016 to hit the endline target of 7,000 girls enrolled by February 2017.

Finally, the target number of beneficiaries set out to be reached by Link (Ethiopia) stands out as it is much larger than the other projects. This is due to the fact that all girls enrolled in primary schools in the treated woredas are regarded as direct project beneficiaries because of the systematic changes in the project.

Reported treatment shows some differences in exposure in treatment and control communities at midline

Figure 3 below shows the percentage of households in treatment and control areas that have reported that their girls received various types of intervention activities[42] (project data reanalysis). It shows **some differences in reported exposure by treatment and control communities at midline**. In three cases, there is a noticeable difference (more than ten percentage points) between the treatment and control groups: households surveyed in ICL (Kenya), TfAC (Malawi) and PEAS (Uganda) treatment groups reported a higher exposure to interventions than in the control groups. This means that these IW projects have a stronger visibility among their target groups, in particular for TfAC (Malawi) for which the 'self-reported' treatment covers three different activities (special classes or study groups, tutoring, school books provided).

Figure 3: Types of treatment received by project area (Reanalysis from Project Datasets)



[42] Projects included in the tables represent those for which household surveys were received that included the relevant standard indicators developed by the EM.

For projects not showing large differences in reported exposure by treatment and control communities at midline, this does not necessarily mean that control groups benefited from GEC project interventions between baseline and midline. It can also reflect the presence of other actors delivering education projects in the areas targeted by these projects.

At any given time, it is likely that multiple development projects are being carried out in treatment and control areas or their surrounding areas. These types of difficulties were reported by projects like Viva (Uganda) for example, who noted that other organisations carrying out research and other activities in some of the control communities led to confusion and frustration in schools and households in these communities. Households questioned whether their information was being used to raise money for the project, and parents also expressed frustration regarding empty promises made by other research groups. In response to this, Viva (Uganda) had to explain why the project was not being implemented in their communities and tried to encourage them to participate in the survey for the wider benefits of the community.

Reported treatment is also likely to be impacted by spillover effects between treatment and control groups. As projects scale up over time, some begin to treat communities that were previously in the control group. This could also be due to close proximity of treatment and control groups and migration of families from control to treatment areas or families moving their daughters to treatment schools. When treatment and control communities are within close proximity of one another, it is more likely that the availability of improved learning conditions nearby is known to families in control communities and, therefore, more likely that they self-select into treatment. Furthermore, it is common in these contexts that word-of-mouth about interventions in the areas spread beyond direct beneficiary communities. When control communities are geographically close to treatment communities, families may report knowledge of these interventions being carried out without being beneficiaries themselves.

Key findings – To what extent has the IW reached marginalised girls?

Findings suggest that IW projects target **girls who are disadvantaged across a variety of dimensions that differ across project areas**. Some projects consider all girls in their project areas to be marginalised and thus target all girls who live in the intervention areas. Conversely, some projects apply a more detailed range of eligibility criteria to select girls in communities or within schools that they consider to be particularly marginalised. For instance, some projects pay particular attention to out-of-school girls, girls in poverty and disabled girls, and set up particular interventions to benefit these marginalised groups. The different factors of marginalisation targeted by the projects reflect DFID's approach to allow projects to define marginalisation as they see fit and in relation to the project's context.

The majority of projects (13 out of 19) have **succeeded in reaching their target number of beneficiaries**, and the other six projects appear to be on track to reach their target numbers by endline. Projects that have been successful have cited parts of their interventions that they have found helpful in facilitating outreach, such as community involvement in project implementation, extra-curricular activities and use of local languages.

Twelve of the 19 IW projects extended their target group of beneficiaries after baseline to include **additional markers of marginalisation**, including disabled girls, girls who had dropped out of school, young mothers and girls experiencing poverty. These projects found that their interventions were benefitting more girls than originally expected and/or that girls in their intervention areas were experiencing more varied types of marginalisation. This suggests that projects are adapting to better fit the contexts in which they are working and can identify the types of girls that are benefitting (and can benefit) from their interventions.

Some differences in reported exposure by treatment and control communities at midline can be found across projects which included exposure questions in their household surveys. For a few projects, activities (e.g. receiving special tutoring or help with schoolwork, and talking to girls about enrolment in school) were mentioned to the same extent in both treatment and control areas. This may be explained by the **presence of other actors delivering education projects in these areas**. Qualitative analysis and project reports shows that IW and non-IW activities have been taking place in communities and schools in both treatment and control areas.

Lessons learned

- Girls targeted by IW projects are disadvantaged at varying degrees and across different dimensions. The variety of types of marginalisation and the diversity of reasons *why* girls are educationally marginalised implies that **activities that aim at improving girls' learning have to be context-specific and tailored to girls' specific needs**.
- **Specific, household, or girl-level targeting of beneficiaries** allows projects to develop intervention designs that are more tailored to the types of marginalisation girls are facing and their needs to overcome them. These intervention types are appropriate when particular types of marginalised girls face barriers that prevent them from benefitting from the existing education system. Projects which target girls from entire communities, on the other hand, are well-suited to **contexts in which all girls are marginalised or facing the same structural barriers** for instance.
- **Some aspects of educational marginalisation are not gender-specific** and preclude both boys as well as girls from achieving learning outcomes. For example, if there are no schools in a particular area, then boys as well as girls will not have access to education. As such, a project's ability to remove barriers to education depends on which factors have the greatest impact on learning outcomes in the context. In their approach to targeting, IW projects have shown that these factors may or may not be gender-specific.
- Our evidence suggests that **non-GEC activities are taking place in some treatment and control areas and address similar educational barriers**. It is also common in these contexts that word-of-mouth about interventions in the areas spread beyond direct beneficiary communities. When control communities are geographically close to treatment communities, families may report knowledge of these interventions being carried out without being beneficiaries themselves.
- It is difficult to conclude about the **actual degree of exposure to interventions** target communities are experiencing. From an M&E standpoint, this poses difficulty for projects to conduct valid quasi-experimental designs because actors, target populations and scopes of activities are moving, and spillover effects are hard to capture through community-based surveys.

3.2 What impact has the IW had on marginalised girls' learning?

Seven projects show a significant improvement in literacy beyond that shown in their control groups. Across the ten projects reporting reading fluency in words per minute, reading fluency has improved by 16 words per minute on average over a period of two school-years, which is three words per minute above control groups' scores. For projects working with both in-school and out-of-school girls, most of the improvement in reading fluency can be attributed to out-of-school girls.

Numeracy EGMA scores increased by 13 points on average, with five projects showing an improvement which is significantly different from the improvement observed in control groups. Across the ten projects using EGMA and reporting numeracy as a score /100, treatment group numeracy has increased by 13 points on average, which is four points above control groups' scores.

Learning is one of the GEC's key outcomes. Throughout this report, we use the term "learning" to describe girls' progress in school and the acquisition of new skills and knowledge in relatively broad terms. However, when measuring learning as a GEC outcome, we apply a more specific definition of learning as "a change in ability over time" in literacy (i.e. reading fluency and reading comprehension), and numeracy skills.

All IW projects were required to include a learning assessment as part of their M&E design. They had the choice between different types of standardised assessments with the majority opting for a variant of the Early Grade Reading Assessment (EGRA)[43] and Early Grade Math Assessment (EGMA)[44] tools.

Literacy – EGRA is used to measure the extent to which girls can demonstrate the *most basic* foundation skills for literacy acquisition in early grades. When taking this oral test, girls must perform a number of tasks such as recognising letters of the alphabet, reading simple words, understanding sentences and paragraphs, and reading with comprehension. EGRA scores were reported in various ways by projects (Box 2), as some projects presented overall EGRA scores whereas other projects reported on oral reading fluency measured by words per minute (wpm), a key metric required for projects opting for Payment by Results (PbR).

Numeracy – EGMA is used to measure the extent to which girls can demonstrate foundational numeracy skills in early grades. Girls are asked to: identify numbers; distinguish different quantities; identify missing numbers; complete number patterns; and perform basic addition and subtraction exercises. Projects reported on the results that girls achieved on a range of numeracy subtask and typically present a score/100.

Other forms of learning assessment – Four projects used the Uwezo test ("capability" in Kiswahili), which is adapted from the Annual Status of Education Report (ASER) instrument. It displays distinct competency levels that allow scoring of the literacy and numeracy levels of a child. One project used ASER (ChildFund (Afghanistan)), and another project used a National Assessment (Camfed (Zambia)).

Box 2: Tests and scales not always comparable

As the scales differ from one test to another, **all literacy and numeracy test results are not comparable**. For instance, EGRA test usually scores girls' literacy in terms of words per minute read, but for TfAC (Malawi) literacy is a composite score between 1 and 68[45] which excludes any comparison with other projects using EGRA. Similarly, EGMA is usually scored /100 but some projects reported the percent of correct responses. As for the Uwezo test, it measures literacy and numeracy through levels but the number of levels differ from one project to another making comparisons difficult. Annex D presents a summary of the data collection tools used to measure and report on learning across all 19 IW projects.

[43] EGRA is an orally administered student assessment designed to measure the most basic foundation skills for literacy acquisition in the early grades: recognising letters of the alphabet, reading simple words, understanding sentences and paragraphs and listening with comprehension.
[44] EGMA is an oral assessment designed to measure a student's foundation skills in numeracy and mathematics in the early grades, including number identification, quantity discrimination, missing-number identification, word problem solving, addition and subtraction, shape recognition and pattern extension.
[45] At baseline, words per minute task was not administered and only comprehension was tested. At midline, words per minute tasks were administered and comprehension was tested in the same way as in baseline. In order to allow a comparison between baseline and midline, a weighted average of the EGRA subtasks was calculated, excluding the word per minute task. For midline-endline comparison, the evaluation will be done based on words per minute.

Benchmarks for literacy and numeracy and comparability of EGRA results across languages

International education experts consider oral reading fluency a strong predictor of later literacy[46]. Children who do not acquire basic reading skills at an early age are more likely to repeat grades and eventually drop out of school, while the performance gap between early readers and non-readers increases over time. It is generally assumed that students should be able to read **a minimum of 45-60 words per minute** in order to understand a simple passage of text (Figure 4).

To date, no comparable benchmarks have been developed for the assessment of EGMA results. There is no established, single metric that readily represents mathematical ability as accurately as oral reading fluency (in wpm) represents literacy across subtasks.

Comparability across languages

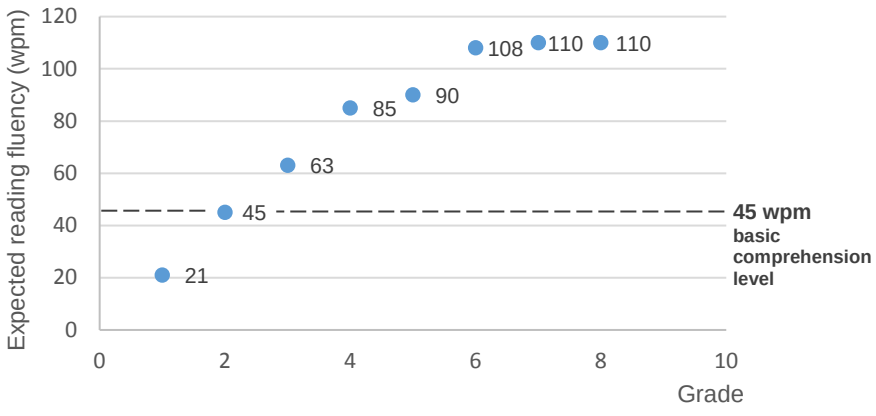
While the EGRA test was developed and adapted for use in a range of different languages, establishing comparisons across languages is generally discouraged. Such comparisons should be interpreted with caution as reading acquisition rates are influenced by the features of the language (Seymour et al., 2003). However, some recent research examples have been supportive of cross-linguistic comparisons. For instance, processes of reading are considered universal regardless of language (Dunlap and Perfetti, 2008). Similarly, USAID's EdData II project, led by RTI International, has shown that "*there are sufficient similarities across languages in the skills that contribute to successful reading, [and] with care, they could be used to make approximate comparisons of some reading assessment results*"[47]. Importantly, it is encouraged that **change is measured over time within a language**, which reflects the approach taken across IW projects and aligns with the way we present findings in this report.

In general, caution should apply when interpreting changes over time in reading fluency (wpm) averaged across the IW, as the rate of progression may commonly be higher in some languages compared to others. Comparisons against international benchmarks presented in this report are indicative only.

Among the ten IW projects using EGRA tests to measure literacy, six used the English version of the test. *Two projects used both English and local versions of the test: Link (Ethiopia) administered the test in Wolaitigna for girls in Grade 2, and in English for girls in Grade 6, whereas HPA (Rwanda) let the girls choose between English or Kinyarwanda. For these two projects, EGRA scores presented in Figure 6 are the average across both tests. Finally, TfAC (Malawi) and VSO (Nepal) only measure literacy in local languages (Chichawa and Nepali, respectively).*

Figure 4: International benchmarks of oral reading fluency by grade and age[48]

Grade	Age	Expected reading fluency (wpm)	Year-on-year improvement (wpm)
1	6 years	21	21
2	7 years	45	24
3	8 years	63	18
4	9 years	85	22
5	10 years	90	5
6	11 years	108	18
7	12 years	110	2
8	13 years	110	0



[46] Abadzi, H. (2011), *Reading Fluency Measurements in EFA FTI Partner Countries: Outcomes and Improvement Prospects*, GPE Working Paper Series on Learning, No. 1, Education for All Fast Track Initiative Secretariat, World Bank, Washington DC.
[47] USAID's EdData II project (2015), Comparing reading assessment results across languages, EdData II: Education Data for Decision-Making.
[48] Abadzi, H. (2011), *Reading Fluency Measurements in EFA FTI Partner Countries: Outcomes and Improvement Prospects*, GPE Working Paper Series on Learning, No. 1, Education for All Fast Track Initiative Secretariat, World Bank, Washington DC.

Tests not measuring words per minute

The Uwezo test assesses literacy by using levels rather than a score, questions or subtasks. It measures children's ability to perform literacy and numeracy tasks at a level of difficulty that is typical for Primary Grade 2 assignments. Ability is then reported as the level of tasks that the child can perform comfortably. Although this test allows to report on students' learning progress, no benchmark on the level attained at each grade has been found. Annex D presents a description of the tasks that have to be mastered in order to reach the level in Uwezo test.

It is important to note that some projects have adapted the test, limiting comparability with other projects. For instance, ICL (Kenya) administered a ten-level Uwezo test for literacy and numeracy. Finally, one project used ASER (ChildFund (Afghanistan)), and another project used a National Assessment (Camfed (Zambia)).

Description of available data

Of the 19 IW projects, the number of projects providing information for learning indicators is as follows:

- Literacy test scores (EGRA, wpm): 10 projects
  Literacy test scores (other tests/ units): 6 projects
  Out-of-school girls' literacy (EGRA, wpm): 5 projects
- Numeracy test scores (EGMA, score/100): 10 projects
  Numeracy test scores (other tests/ units): 6 projects
  Out-of-school girls' numeracy (EGMA, score/100): 4 projects

Weighing across IW projects

The findings we present in this section and throughout the report are weighted by the number of girls in the projects' samples, by grade, then averaged across all targeted grades. Projects' samples are derived from projects' target groups and generally reflect projects' learning beneficiaries by grade. This means that the findings presented in this report reflect **the outcomes achieved for the specific learning beneficiaries targeted by each project**.

When we present an average at the window level, this is a simple average across IW projects. In addition, when specified, we present a **weighted average across the IW to reflect varying project sizes** (total number of direct learning beneficiaries).

Projects' achievements against SD targets

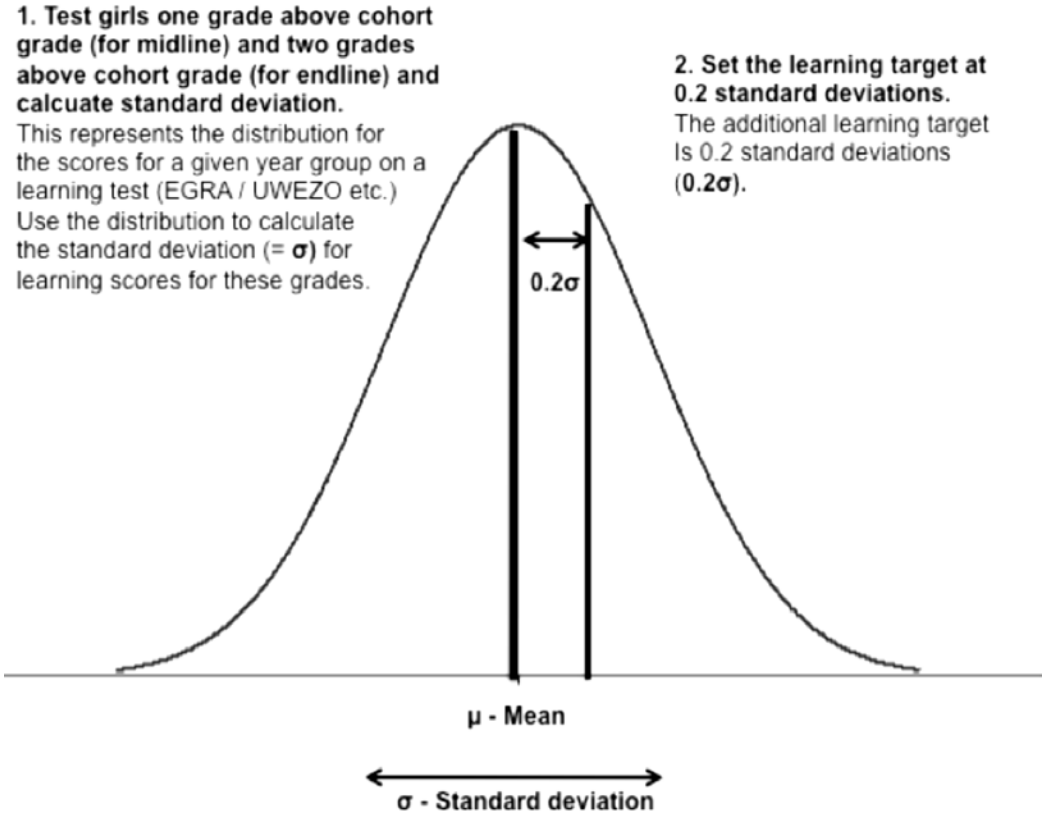
In addition to presenting projects' literacy and numeracy scores achieved at midline, we also indicate **whether projects have achieved their targets**, as defined at baseline and expressed in standard deviations (SD). Projects' targets are the same for both literacy and numeracy, and were set by the FM and projects using baseline learning data[49]. By choosing to define the learning target as a proportion of the standard deviation of learning scores for girls, the GEC aims to account for the specific learning distributions among target populations, and hence to reflect the context in which each project intervenes.

At baseline, projects were asked to (Figure 5):

- **Measure the learning scores** of girls enrolled in *one grade and two grades higher than the cohort group* and calculate their standard deviations. Those were then used to define the midline and endline targets respectively.
- **Set the learning target at 0.2 standard deviation** of scores for the relevant grade[50]. Some projects have chosen to use a higher change in standard deviation, 0.25 or 3 SD. Projects targeting out-of-school girls also tested a sample of Grade 1 girls to establish a target for out-of-school girls.

[49] Fund Manager for the GEC (September 2013), *GEC Learning guidance on outcome targets*.
[50] 0.2 and 0.3 SD are commonly used as a target in educational programmes. An increase in learning scores of 0.4 SD and over is considered a very high achievement across educational studies. Source: Evans, David K., and Anna Popova. 2016. "What really works to improve learning in developing countries? An analysis of divergent findings in systematic reviews," World Bank Research Observer 31(2): 242-270.

Figure 5: Learning target setting for GEC projects[51]



This process allows to set targets that are specific to the project's context. It also enables a **comparison of projects' achievement across different learning tests** (EGRA/ EGMA, Uwezo, ASER, national assessments), since standard deviation is dependent upon the type of assessment used.

At midline, we find that the projects which achieved or over-achieved their midline targets are those which show a significant impact over and above their control groups.

ChildFund (Afghanistan) is the only project which has over-achieved its literacy and numeracy targets for which we do not present a difference-in-difference adjusted estimator (Table 11 and Table 13). The reason is that ChildFund (Afghanistan) does not use control groups at midline, and therefore, no data is available to establish a counterfactual. The achievement against target has been derived through a simple different between baseline and midline scores, which means that the literacy and numeracy impacts in SD are compiled using a before-after comparison on a sample of out-of-school girls which benefited from the project's interventions since baseline[52].

[51] Fund Manager for the GEC (September 2013), *GEC Learning guidance on outcome targets*.
[52] The project only works with out-of-school girls.

3.2.1 What impact has the IW had on literacy?

Table 11: Difference in literacy scores between baseline and midline in treatment and control groups (19 projects)

Literacy		Eco[i]	PEAS	Oppty		Viva	RV	LCSU	LCDK		ICL	Link		HPA		Red	BRAC	VSO	Camfd	TfAC	Varkey	VSO	Mercy[ii]	ChFnd
		Uganda							Kenya			Eth		Rwa		Sou	Tan	Moz	Zam	Mal	Gha	Nepal		Afgh
Parameters	Test/ language		EGRA (English)	EGRA (English)		EGRA (English)	EGRA (English)	Uwezo (English)	Uwezo (English)	Uwezo (Kiswahili)	Uwezo (English)	EGRA (English)	EGRA (Wolaitigna)	EGRA (English)	EGRA (Kinyarwanda)	EGRA (English)	EGRA (English)	Uwezo (Portuguese)	lational tes (English)	EGRA (Chichewa)	EGRA (English)	EGRA (Nepali)		ASER (English)
	Unit		wpm	wpm		wpm	wpm	6 levels	5 levels		7 levels	wpm		wpm		wpm	wpm	5 levels	Score/100	Score from 1 to 68[iii]	wpm	wpm		5 levels
	Control group used		Yes	Yes[iv]		Yes	Yes	Yes	Yes		Yes	Yes		Yes		Yes	Yes	Yes	Yes	Yes[v]	Yes	Yes		No
	In-school cohort		Grades 7, 8, 9	Grades 1 to 10 (tuition loan)[vi]	Grades 2, 5, 8, 9 (school loan)	Grades 1 to 11	Grades 1 to 5	Grades 1 to 6	Grades 1 to 8		Grades 4, 5, 6, 7, 9, 10	Grade 2	Grade 6	Grades 1 to 9		Grades 2 and 5	Grades P5 and P6	Grade 6	Grade 5	Grades 5, 6	Grades 2, 3 and 4	Grades 1 to 4		Winter CBE, Winter ALP
	Out-of-school cohort		No	No		Yes	No	No	Yes[vii]		No	No		Yes		Yes	Yes	Yes	No	Yes	No	Yes		No
	Sample size[viii]		Yes	Yes		Yes	No	No	No[ix]		No	Yes		Yes		Yes	No	Yes	Yes	Yes	Yes	Yes		No
	Data quality[x]	1	2	3		3	2	2	3		3	3		2		3	2	3	1	2	3	3	1	2
Overall impact (all grades and out-of-school girls)																								
Intervention	Baseline		80,9	33,2	24,3	49,6	17,5	1,4	2,7	2,6	4,8	30,0	2,7	11,1	17,3	11,4	36,5	3,8	24,1	37,3	11,2	19,6		1,2
	Midline		105,3	45,1	43,3	77,8	30,5	3,4	3,6	3,5	5,5	51,8	15,4	22,2	33,4	21,9	36,7	3,8	27,3	52,0	29,2	42,2		2,3
Control	Baseline		85,1	32,5	24,1	44,9	9,9	1,7	2,6	2,4	4,6	29,2	2,1	12,1	16,5	11,7	35,9	3,5	23	39,6	11,1	19,2		
	Midline		106,9	47,2	34,9	67,3	21,6	3,7	3,1	2,9	5,6	39,7	7,2	17,7	24,2	24,1	34,0	3,6	27,8	51,9	28,9	40,7		
Diff-in-diff. adjusted estimator			3,78	**9,74**		**7,38**	1,61	0,11			**0,595**	**7,55**	**11,36**	**5,29**	**8,42**	-1,88	2,96	0,05	-2,21	**4,08**	0,07	**5,94**		
p-value			0,345	**0,002**		**<0,001**	0,510	0,480			**0,001**	**0,001**	**0,001**	**0,010**	**<0,001**	0,690	0,520	0,840	0,140	**0,037**	0,960	**0,050**		
Midline target (sd)		0.25	0.25	0.2		0.3	0.2	0.3	0.3		0.3	0.3		0.2		0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.35
Literacy impact (sd)		n/a	0.12	0.26		0.24	0.21	0.11	n/a		0.40	0.59		0.54		-0.65	0.18	0.03	-0.15	0.26	0.00	0.52	n/a	1.55
Project achievement against target		n/a	46%	132%		80%	103%	35%	n/a		134%	196%		268%		-324%	61%	11%	-49%	86%	1%	173%	n/a	441%
		Inconclusive or n/a	Target not achieved	Target achieved		Target half-achieved	Target achieved	Target not achieved	Inconclusive or n/a		Target achieved	Target over-achieved		Target over-achieved		Negative impact	Target half-achieved	Target not achieved	Negative impact	Target half-achieved	Target not achieved	Target over-achieved	Inconclusive or n/a	Target over-achieved

Notes

The first rows of the table describe the **type of assessment** used in order to measure literacy, the **unit** used, the presence or absence of a **control group** in the project analysis, the **grades** of the girls tested, and the presence or absence of an **out-of-school cohort** tested. The row **sample size** provides information on whether the sample is sufficient to demonstrate statistical significance. **Data quality** rating is a general assessment made by the FM on the quality of the learning data submitted by the project. It covers both literacy and numeracy and it is rated from 1 to 3 as follows: 1 – Inconclusive/ major issues; 2 – Partially conclusive; 3 – Conclusive.

The following rows show the **baseline and midlines scores for the treatment and control groups** as weighted averages extracted from the projects' outcome spreadsheets. These averages have been calculated across different levels or girls' populations (in-school versus out-of-school). Refer to Annex D for disaggregated data. The **adjusted difference-in-difference** row is an estimate of the impact of the project on treatment group compared to the control group. It has been calculated by the FM based on adjustments that are specific to each project. This has been retrieved from the outcome spreadsheets and the **p-value** row just below indicates if the impact is statistically significant (we consider that it is if the p-value<0.05; these projects are highlighted in bold in the table).

Midline target in standard deviation (sd) shows the project's midline target in standard deviation, which is the same for both literacy and numeracy.

The **literacy impact** row shows the impact achieved by each project in standard deviations. **Project achievement against target** is the percentage of target achieved. The last row is a translation in qualitative terms of the adjustment impact in percentage. It is rated from 0 to 5: 0 – Inconclusive or n/a; 1 – Negative impact (<0%); 2 – Target not achieved (0-50%); 3 – Target half-achieved (50-100%); 4 – Target achieved (100-150%); 5 – Target over-achieved (>150%).

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[i] Eco Fuel (Uganda) data deemed not fit for use.

[ii] Major issues with baseline data. The midline evaluator has not been able to systematically match baseline data with cohort girls as the baseline evaluator only provided an ID and the corresponding roll number – available in school registers – but not the names. In some cases, the schools were not able to provide the registers, and in other cases, some roll numbers belonged to boys. As a consequence, a large part of the sample has been replaced at midline and the evidence is deemed inconclusive.

[iii] The EGRA measure is a composite score from 1 to 68 calculated using all subtasks except oral reading fluency. Oral reading fluency was not collected at baseline by the previous external evaluator, preventing subsequent comparisons at midline.

[iv] At baseline, Opportunity (Uganda) had no treatment or control group. The split was determined by who took out loans, once implementation started. As such, Opportunity (Uganda) have updated the baseline treatment/control split at midline to take reflect new knowledge about the composition of treatment and control groups.

[v] A USAID intervention concentrating on EGRA is present in the intervention area which might have positively impacted on literacy scores. It is unknown in which schools exactly the intervention operates.

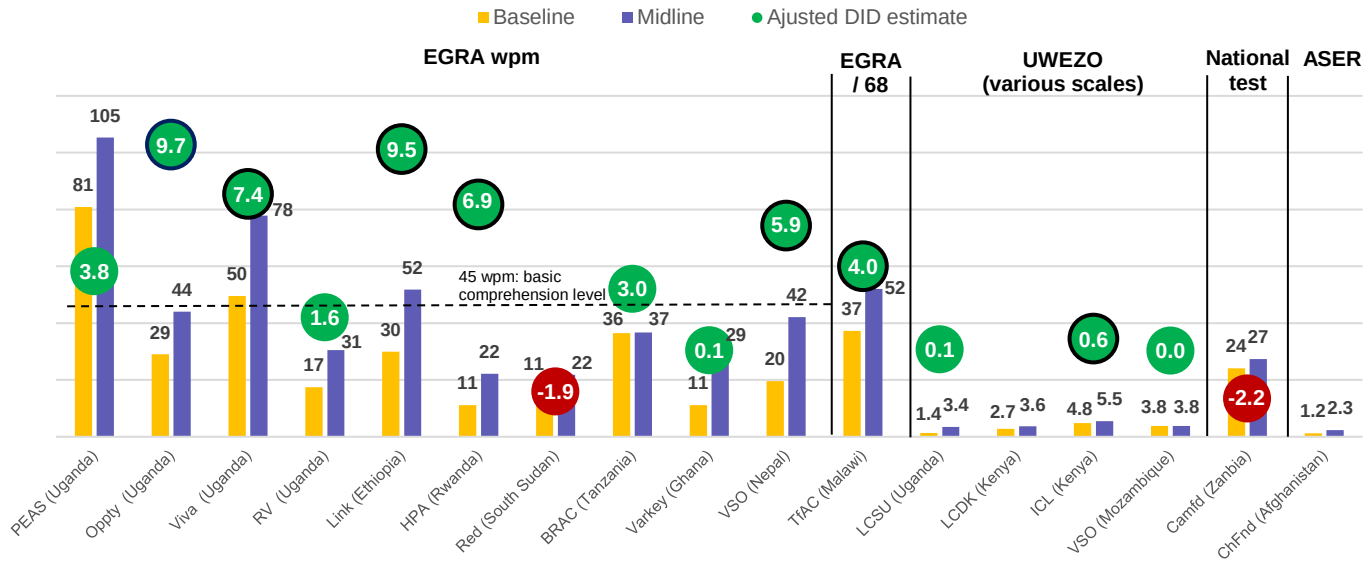
[vi] The project supports two types of loans: School Fee loans (SFL), which are offered to families and are used to pay for the fees of private schools (usually low-medium cost schools), and School Improvement loans (SIL), which go to school proprietors for the purpose of improving school infrastructure. Girls were sampled based on these two loans.

[vii] Out-of-school data only available at baseline.

[viii] Whether sample is sufficient to demonstrate statistical significance.

[ix] No statistical analysis due to sampling error at baseline.

Figure 6: IW projects' literacy scores for the treatment group at baseline and midline, by project (17 projects)[53]



A general improvement in reading fluency is visible in treatment areas for most projects

Among projects using the EGRA test to assess literacy, a general increase of reading fluency scores is visible in treatment groups, except for BRAC (Tanzania) where girls' reading fluency stagnated since baseline (Figure 6). At baseline, two projects reported an average reading fluency of at least 45 words per minute (PEAS (Uganda), Viva (Uganda)). At midline, Link (Ethiopia) shows an average reading fluency of 52 words per minute and another two projects are close to reaching this threshold (VSO (Nepal) and Opportunity (Uganda)).

Due to the different scales used by projects which administered the Uwezo test – 6-levels for LCSU (Uganda), 5 for LCDK (Kenya), 7 for ICL (Kenya) and 5 for VSO (Mozambique), a comparison is difficult. At midline, we find that the improvements observed since baseline are less than or equal to one level, with one project reporting a statistically significant impact over and above its control group (ICL (Kenya)). Finally, ChildFund (Afghanistan), using the ASER test, observed some improvement in its treatment group from baseline to midline.

Box 3: Ugandan projects have higher-than-average literacy levels

In Figure 6, higher literacy levels of projects are seen in Uganda. Although PEAS (Uganda), Opportunity (Uganda) and Viva (Uganda) work with older girls compared to other IW projects, high reading fluency results cannot be solely attributed to the grades targeted. If we compare grade by grade, Opportunity (Uganda) and Viva (Uganda) have much better results at baseline than other IW projects.

This may be explained by the fact that Uganda's educational system provides a better education than other education systems, at least in terms of teaching literacy and numeracy skills to students. Uganda was one of the first African countries to provide free universal primary education in 1997, after Malawi in 1994. The event, designed as a 'Big Bang' approach[54], initially reduced disparities in access to primary education between rural and urban areas. Although an increase in enrolment rates had been observed at the time, concerns were expressed about the quality of education since the number of students passing the national primary leaving exam only marginally increased[55]. To improve the relevance of education to local communities, a Thematic Curriculum was introduced in 2007, focusing on literacy, numeracy and life skills. In addition, education is now delivered in children's mother tongue in their early years. Among the countries covered by IW projects, Uganda has the highest female 15-24 years literacy rate: 85 percent vs. 65 percent on average for other IW countries[56].

[53] Adjusted DID estimates circled in dark blue indicate a significant effect (p<0.05).
[54] http://siteresources.worldbank.org/EDUCATION/Resources/Education-Notes/EduNotesUganda.pdf.
[55] Hedger et al (2010), Sector Budget Support in Practice: Case Study Education Sector in Uganda. ODI: London.
[56] Education data are provided by UNICEF http://data.unicef.org/resources/the-state-of-the-worlds-children-report-2015-statistical-tables/ Accessed 5 October 2016.

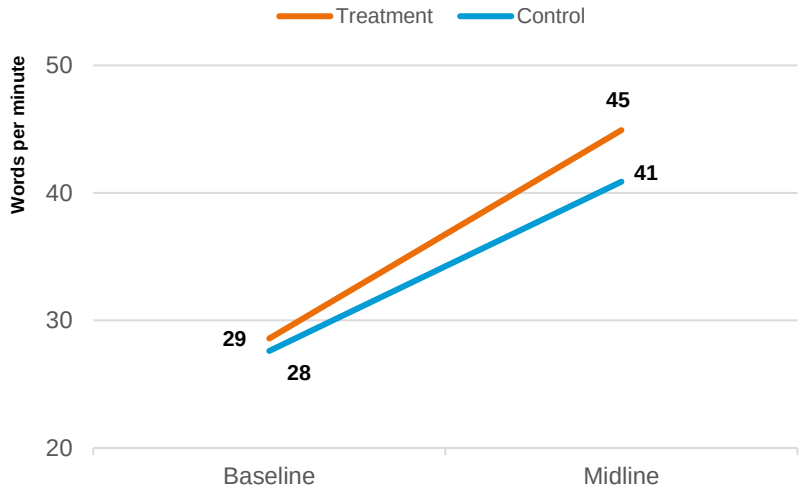
Across the ten projects reporting reading fluency in words per minute, treatment group reading fluency has increased by 16 words per minute on average, which is only three words per minute above control groups' scores

At baseline, girls in intervention and control groups read on average 29 and 28 words per minute respectively, which corresponds to a level attained in Grade 1, according to international benchmarks (Figure 4). Two years later this has increased to 45 words per minute in treatment groups, which corresponds to a Grade 2 level, and also to the minimum required to understand a simple passage of text[57]. In control groups, the average also improved but only to 41. This difference in trends observed for the two groups (intervention and control) suggests that the ten IW projects had a positive effect on the average literacy score of girls in treatment groups at midline by increasing reading fluency by an additional three words per minute compared to control groups (net effect). This difference is of eight words per minute for the five projects for which the difference between intervention and control groups is statistically significant (Table 12).

Table 12: EGRA average word per minute scores between baseline and midline, treatment vs. control (ten projects)

Literacy (reading fluency) 10 projects reporting EGRA wpm	Baseline-to-midline improvement (10 projects)	Adjusted DID estimator when significant (5 projects)
Simple average across projects	16 wpm	8 wpm
Adjusted for number of girls reached	15 wpm	6 wpm

Figure 7: EGRA average word per minute scores between baseline and midline, treatment vs. control (ten projects)



The improvement in reading fluency is significant[58] for only seven projects

For five of the ten projects presented above, there is a significant improvement in reading fluency (net effect). Two additional projects had a significant, positive impact on girls' literacy: ICL (Kenya), which uses a Uwezo test with ten levels, and TfAC (Malawi) which is using EGRA to assess literacy but reports in a different unit (a composite score from 1 to 68).

These seven projects are implementing a wide range of activities, and working in different areas. Most of them are implementing activities related to **infrastructure improvement and provision of resources/ materials** at the

[58] That is, significantly different ($p<0.05$) from the improvement observed in control groups.

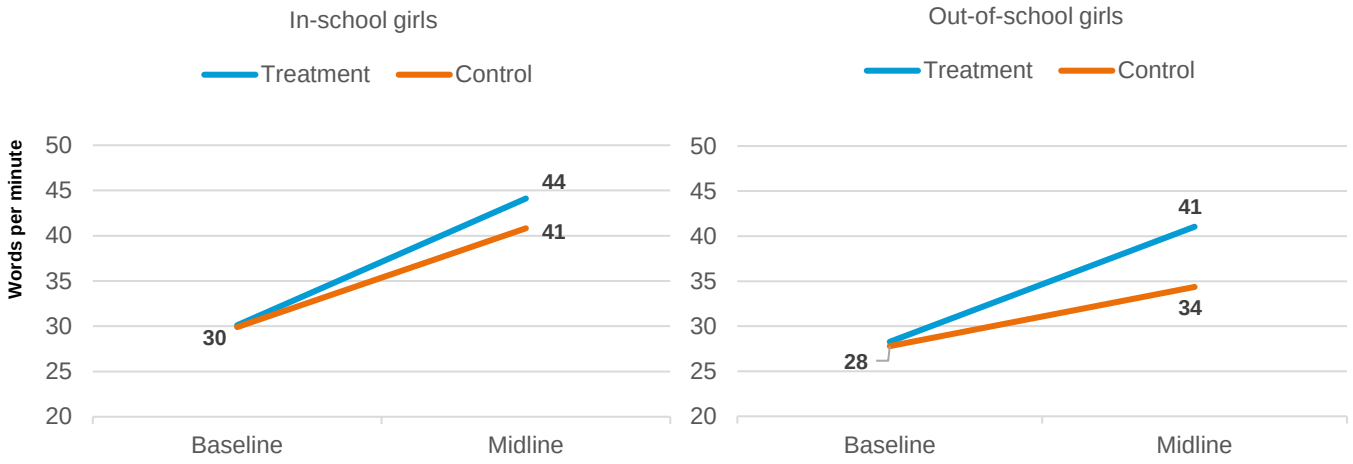
school level, and most of them are providing **teacher training** (refer to Section 3.4 for a further discussion of the effectiveness of interventions).

For projects working with both in-school and out-of-school girls, out-of-school girls' reading fluency scores show a greater improvement than in-school girls' scores

Five projects measured out-of-school girls' literacy: Viva (Uganda), HPA (Rwanda), Red (South Sudan), BRAC (Tanzania) and TfAC (Malawi).

At baseline, the average reading fluency score for in-school girls is 30 words per minute while out-of-school girls score an average of 28 words for both treatment and control groups. At midline, we observe that out-of-school girls' reading fluency score show a higher improvement compared to in-school girls, which suggests that those five projects mostly had a positive impact on *out-of-school* girls' fluency.

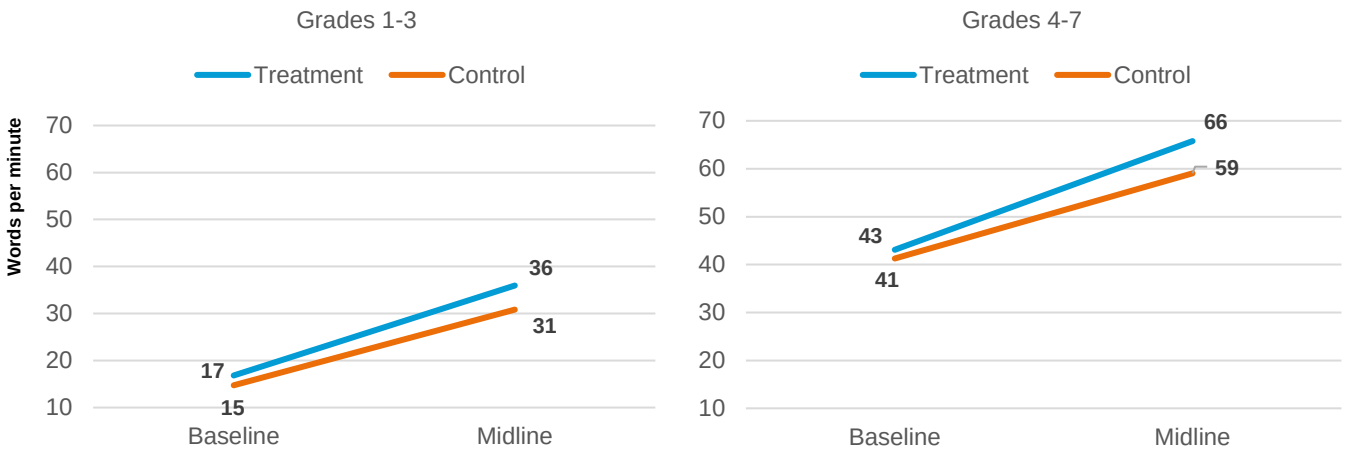
Figure 8: EGRA average word per minute scores between baseline and midline, treatment vs. control, in-school girls and out-of-school girls (five projects)



If we aggregate reading fluency data (words per minute) for Grades 1 to 3 and for Grades 4 to 7, the improvement observed in treatment groups compared to control groups appears to be very similar

On average, treatment girls from Grades 1 to 3 improved their reading fluency by 19 words per minute since baseline. At midline, they read five more words per minute than their counterparts in the control group. Girls from Grades 4 to 7 have a similar improvement in reading fluency with an increase of 23 words per minute between baseline and midline, and read seven more words per minute than girls in control groups at midline.

Figure 9: EGRA average word per minute scores between baseline and midline, treatment vs. control, Grades 1 to 3 and Grades 4 to 7 (eight projects)



3.2.2 What impact has the IW had on numeracy?

Table 13: Difference in numeracy scores between baseline and midline in treatment and control groups (19 projects)

Numeracy		Eco	PEAS	Oppty		Viva	RV	LCSU	LCDK	ICL[xi]	Link		HPA	Red	BRAC	VSO	Camfd	TfAC	Varkey	VSO	Mercy[xii]	ChFnd
		Uganda							Kenya		Eth		Rwa	Sou	Tan	Moz	Zam	Mal	Gha	Nepal		Afgh
Parameters	Test		EGMA	EGMA		EGMA	EGMA	Uwezo	Uwezo	EGMA	EGMA		EGMA	EGMA	EGMA	Uwezo	National test	EGMA	EGMA	EGMA		ASER
	Unit		Score /100	Score /100		Score/100	Score /100	7 levels	5 levels	% correct response	Score/100		Score /100	Score /100	Score/100	6 levels	Score/100	% correct responses	Score/100	Score/100		4 levels
	Control group used		Yes	Yes[xiii]		Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		No
	In-school cohort		Grades 7, 8, 9	Grades 1 to 10 (tuition loan)[xiv]	Grades 2, 5, 8, 9 (school loan)	Grades 1 to 11	Grades 1 to 5	Grades 1 to 6	Grades 1 to 8	Grades 4, 5, 6, 7, 9, 10	Grade 2	Grade 6	Grades 1 to 9	Grades 2 and 5	Grades P5 and P6	Grade 6	Grade 5	Grades 5, 6	Grades 2,3 and 4	Grades 1 to 4		Winter CBE, Winter ALP
	Out-of-school cohort		No	No		Yes	No	No	Yes[xv]	No	No		Yes	Yes	Yes	Yes	No	Yes	No	Yes		No
	Sample size[xvi]		Yes	Yes		Yes	No	No	No[xvii]	No	Yes		Yes	Yes	No	Yes	Yes	Yes	Yes	Yes		No
	Data quality	1	2	3		3	2	2	3	3	3		2	3	2	3	1	2	3	3	1	2
Overall impact (all grades and out-of-school girls)																						
Intervention	Baseline		57,1	14,9	12,8	56,6	42,6	2,5	2,7		31,6		30,3	69,1	77,1	3,8	26,7	76,2	44,6	42,0		1,1
	Midline		69,2	19,2	17,9	69,5	57,8	4,9	4,1		44,4		56,8	76,3	76,6	3,8	31,0	80,2	60,1	63,5		2,3
Control	Baseline		57,5	15,5	10,8	60,4	39,2	2,8	2,6		31,4		29,3	71,9	78,3	3,5	26,8	75,6	44,9	42,0		
	Midline		68,0	20,8	14,7	61,7	51,1	5,0	3,8		35,1		58,1	76,4	78,6	3,6	31,6	80,4	55,4	61,4		
Diff-in-diff. adjusted estimator			1,35	1,90		**11,93**	**3,67**	0,23			**8,97**	**8,82**	-2,38	2,69	-0,82	-0,09	-0,73	2,0	**4,796**	**0,07**		
p-value			0,460	0,145		**<0,001**	**0,030**	0,410			**0,043**	**0,040**	0,400	0,860	0,832	0,430	0,570	0,246	**<0,001**	**0,020**		
Midline target (sd)		0.25	0.25	0.2		0.3	0.2	0.3	0.3	0.3	0.3		0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.35
Numeracy impact (sd)		n/a	0.09	0.14		0.54	0.26	0.11	n/a	n/a	0.43		-0.15	0.12	-0.06	-0.08	-0.06	0.18	0.27	0.56	n/a	1.77
		n/a	36%	71%		180%	131%	36%	n/a	n/a	142%		-75%	59%	-20%	-26%	-19%	60%	136%	185%	n/a	506%
Project achievement against target		Inconclusive or n/a	Target not achieved	Target half-achieved		Target over-achieved	Target achieved	Target not achieved	Inconclusive or n/a	Inconclusive or n/a	Target achieved		Negative impact	Target half-achieved	Negative impact	Negative impact	Negative impact	Target half-achieved	Target achieved	Target over-achieved	Inconclusive or n/a	Target over-achieved

Notes

The first rows of the table describe the **type of assessment** used in order to measure numeracy, the **unit** used, the presence or absence of a **control group** in the project analysis, the **grades** of the girls tested, and the presence or absence of an **out-of-school cohort** tested. The row **sample size** provides information on whether the sample is sufficient to demonstrate statistical significance. **Data quality** rating is a general assessment made by the FM on the quality of the learning data submitted by the project. It covers both literacy and numeracy and it is rated from 1 to 3 as follows: 1 – Inconclusive/ major issues; 2 – Partially conclusive; 3 – Conclusive.

The following rows show the **baseline and midlines scores for the treatment and control groups** as weighted averages extracted from the projects' outcome spreadsheets. These averages have been calculated across different levels or girls' populations (in-school versus out-of-school). Refer to Annex D for disaggregated data. The **adjusted difference-in-difference** row is an estimate of the impact of the project on treatment group compared to the control group. It has been calculated by the FM based on adjustments that are specific to each project. This has been retrieved from the outcome spreadsheets and the **p-value** row just below indicates if the impact is statistically significant (we consider that it is if the p-value<0.05; these projects are highlighted in bold in the table).

Midline target in standard deviation (sd) shows the project's midline target in standard deviation, which is the same for both literacy and numeracy.

The **numeracy impact** row shows the impact achieved by each project in standard deviations. **Project achievement against target** is the percentage of target achieved. The last row is a translation in qualitative terms of the adjustment impact in percentage. It is rated from 0 to 5: 0 – Inconclusive or n/a; 1 – Negative impact (<0%); 2 – Target not achieved (0-50%); 3 – Target half-achieved (50-100%); 4 – Target achieved (100-150%); 5 – Target over-achieved (>150%).

[xi] Baseline data was deemed unusable due to ceiling effect.

[xii] Major issues with baseline data. The midline evaluator has not been able to systematically match baseline data with cohort girls as the baseline evaluator only provided an ID and the corresponding roll number – available in school registers – but not the names. In some cases, the schools were not able to provide the registers, and in other cases, some roll numbers belonged to boys. As a consequence, a large part of the sample has been replaced at midline and the evidence is deemed inconclusive.

[xiii] At baseline, Opportunity (Uganda) had no treatment or control group. The split was determined by who took out loans, once implementation started. As such, Opportunity (Uganda) have updated the baseline treatment/control split at midline to take reflect new knowledge about the composition of treatment and control groups.

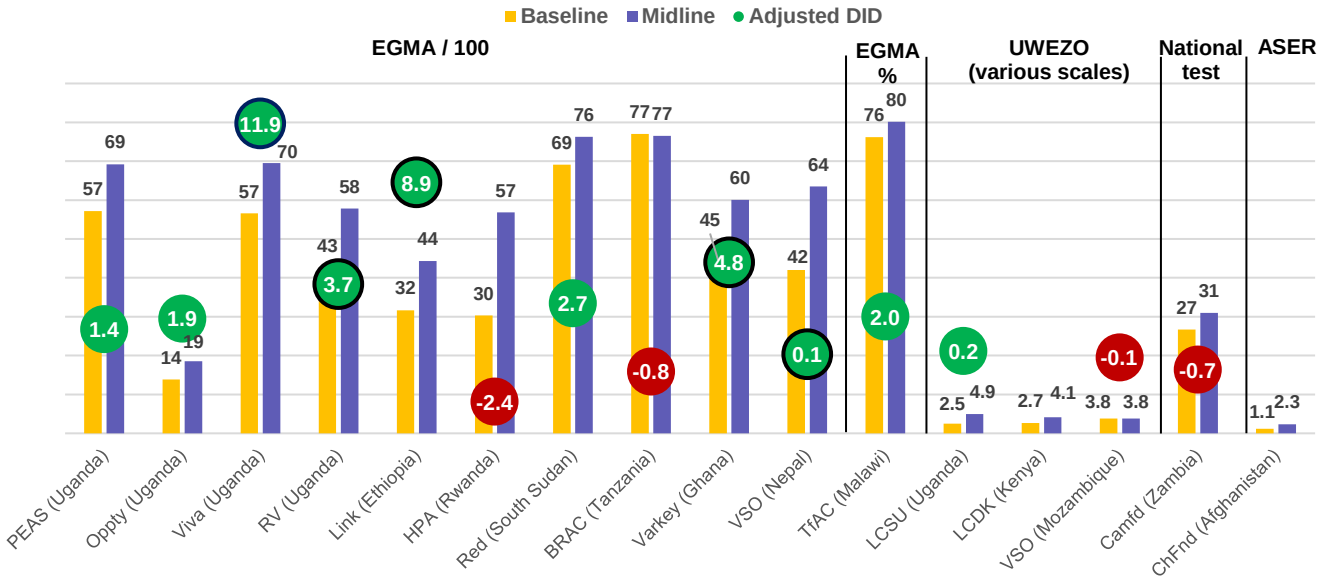
[xiv] The project supports two types of loans: School Fee loans (SFL), which are offered to families and are used to pay for the fees of private schools (usually low-medium cost schools), and School Improvement loans (SIL), which go to school proprietors for the purpose of improving school infrastructure. Girls were sampled based on these two loans.

[xv] Out-of-school data only available at baseline.

[xvi] Whether sample is sufficient to demonstrate statistical significance.

[xvii] No statistical analysis due to sampling error at baseline.

Figure 10: IW projects' numeracy scores for the treatment group at baseline and midline, by project (16 projects)[59]



A general improvement in numeracy is visible in treatment areas for most projects; however, the improvement is significant[60] for only five projects

Similarly to literacy scores, at the project level, for the treatment sample, there is a general increase in the EGMA scores from baseline to midline, except for BRAC (Tanzania) which shows a stagnation at 77 points (Figure 10).

Among the ten projects using EGMA and scoring the test out of 100, statistical tests show that five of them had a significant impact on girls' numeracy. None of the projects using other numeracy tests (Uwezo, National assessment, ASER) demonstrated a significant effect on treatment groups compared to control groups.

Across the ten projects using EGMA and reporting numeracy as a score /100, treatment group numeracy has increased by 13 points on average, which is only four points above control groups' scores

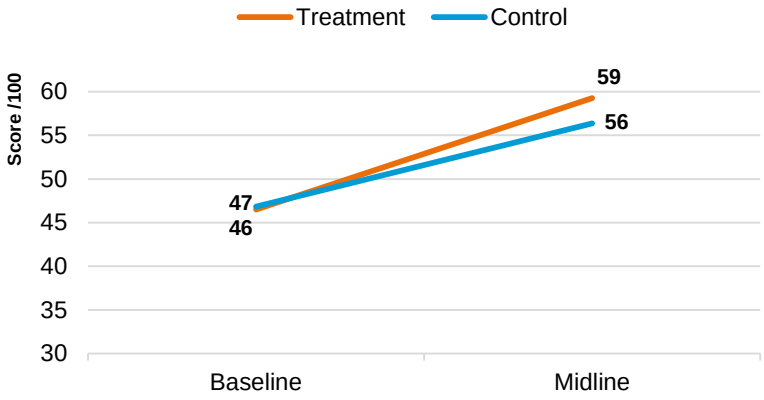
At baseline, the average score in treatment and control groups is 46 and 47 respectively. After two years of implementation (Figure 11), at midline, average EGMA scores have increased to 59 in treatment groups (13 points) and to 56 in control groups (nine points). This suggests a relatively small (four points above control groups' scores), positive effect of IW projects on girls' numeracy in treatment groups at midline. This effect is of eight points for the five projects for which the difference between intervention and control groups is statistically significant (Table 14).

Table 14: EGMA average scores between baseline and midline, treatment vs. control (ten projects)

Numeracy (score/100) 10 projects reporting EGRA scores	Baseline-to-midline improvement (10 projects)	Adjusted DID estimator when significant (5 projects)
Simple average across projects	13 points	8 points
Adjusted for number of girls reached	13 points	4 points

[59] Adjusted DID estimates circled in dark blue indicate a significant effect ($p<0.05$).
[60] That is, significantly different ($p<0.05$) from the improvement observed in control groups.

Figure 11: EGMA average scores between baseline and midline, treatment vs. control (ten projects)

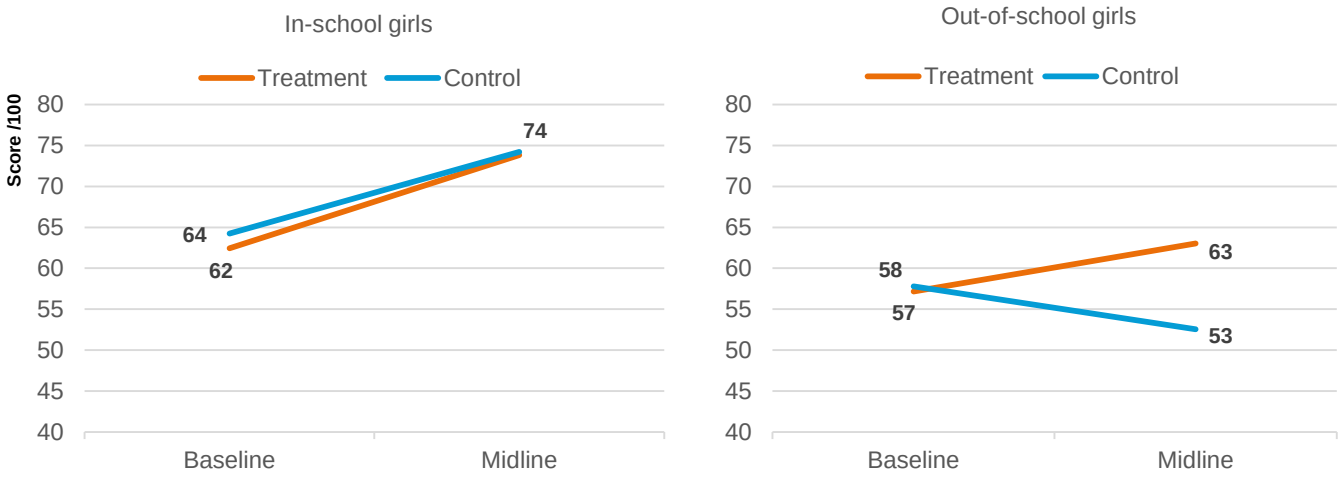


For projects working with both in-school and out-of-school girls, out-of-school girls' numeracy scores increased in treatment groups while dropping in control areas

For out-of-school girls' numeracy, we only have data from four projects: Viva (Uganda), HPA (Rwanda), Red (South Sudan) and BRAC (Tanzania).

At baseline, across those four projects, EGMA scores are similar in treatment and control groups: 62 and 64 for in-school girls against 58 and 57 for out-of-school girls. At midline, in-school girls from treatment and control group have an identical EGMA score of 74 points, suggesting that the four projects had no impact on in-school girls' numeracy performances. Only Viva (Uganda) showed an improvement in numeracy for in-school girls (with a statistically significant difference-in-difference of 11 points).

Figure 12: EGMA average scores between baseline and midline, treatment vs. control, in-school girls and out-of-school girls (four projects)



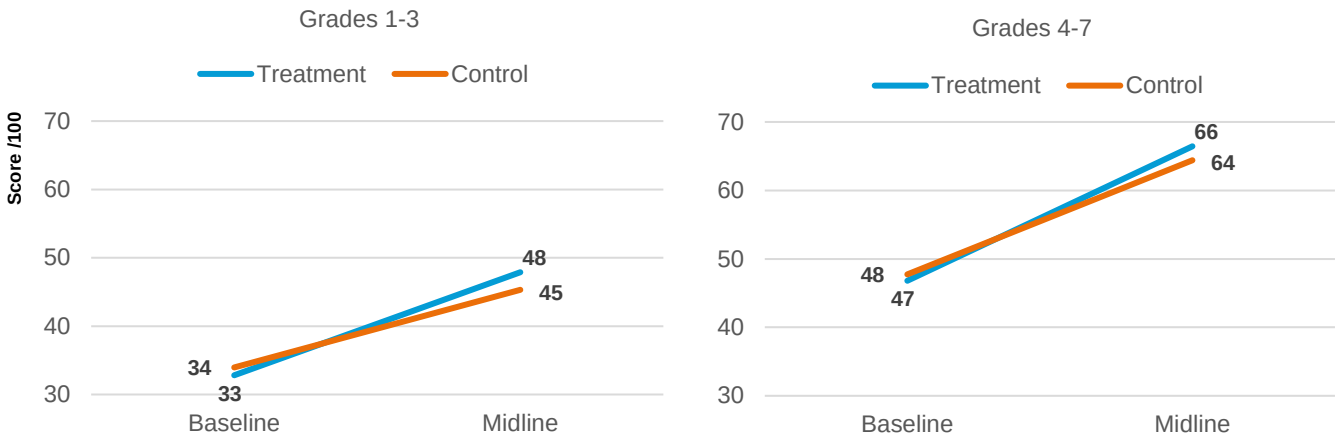
By contrast, we observe an improvement of six points for out-of-school girls in the treatment group, and a five point drop in numeracy scores within the control group, leading to a difference-in-difference of 11 points between treatment and control groups. This suggests that those four projects had a positive impact on out-of-school girls' numeracy.

Numeracy scores of treatment girls from Grades 4 to 7 show a higher baseline-to-midline improvement than those of their Grade 1 to 3 counterparts; however, there is little difference between treatment and control groups

On average, treatment girls from Grades 1 to 3 improved their numeracy scores by 15 points since baseline, while girls from Grades 4 to 7 improved their scores by 19 points. However, in both cases, girls in treatment groups only perform slightly better than their counterparts from the control groups (respectively three and two points more).

It should be noted that averages across grades hide large disparities. For instance, while no difference is observed between treatment groups and control groups in Grade 3 and 5, the treatment-control difference stands at three to four points for Grades 1, 2, 4 and 6.

Figure 13: EGMA average word per minute scores between baseline and midline, treatment vs. control, Grades 1 to 3 and Grades 4 to 7 (eight projects)



3.3 What impact has the IW had on enabling marginalised girls to be in school?

Over a period of two school-years, there is only a small impact to be observed on attendance (3% improvement over and above the control groups). However, three projects, two of them focusing on school facilities improvement, have had a strong impact on enrolment rates. The poor quality of attendance and enrolment data do not allow for further conclusions on girls' ability to attend and stay in school.

To assess the extent to which girls are attending school across IW projects, we look at a combination of two dimensions that are used together to ensure that girls 'are in school'. These are enrolment and attendance.

Enrolment rates – IW projects report enrolment rates as the proportion of girls in a target community who are enrolled in school. There are two main data sources: household surveys and school registers. Importantly, census data are not always available in target communities, so the enrolment rate sometimes corresponds to the proportion of girls who attend school among the respondents of the household survey. For projects using school registers as a data source, enrolment levels are calculated as the difference between the number of girls enrolled at baseline and the number of girls enrolled at midline in selected schools.

Attendance rates – Attendance rates are compiled using projects' reported findings of the average of the proportion of schooling days attended. Projects collected attendance data from school registers and spot checks (Box 4). For BRAC (Tanzania), this data served to verify some of the self-reported information on enrolment and attendance collected from the surveyed households. Nevertheless, IW projects have pointed out their **lack of confidence in the attendance data** collected to date, as spot checks revealed that school registers were not a consistent and reliable source of information. This may prevent the EM from drawing a definite conclusion with regards to attendance rates of target girls.

Box 4: GEC requirements for IW projects' measurement of attendance

IW projects were provided guidance[61] for the measurement of attendance before they undertook their baseline/ midline research. Although the relationship between attendance and learning is not always clear cut, improving girls' attendance reflects the concern that even when they are enrolled in schools, girls are not necessary attending and learning. As a result, **attendance was chosen as a stronger indicator of the impact of educational interventions than enrolment**.

IW projects were advised of two main options for measuring attendance: they could either track a cohort of marginalised girls over time with girls selected randomly, or collecting data from a sample of intervention schools, designed to represent the entire project population, and a sample of control schools. In the latter case, average attendance is measured for the group without tracking individual girls. In most cases, there were no systems for collecting individual girls' attendance data. As for consequence, most of projects chose the second approach by developing a method to determine the **average attendance of targeted girls**.

Three attendance data sources have been used during the baseline and midline phases of the GEC[62]:

- **School register data** on a representative sample of intervention and control schools. The FM advised to use the same sample of schools between baseline, midline and endline. Between each data collection point, the duration of days or weeks should also be the same (for instance, comparing September to December 2016 rates to September to December 2015 attendance rates for consistency).
- At least three unannounced **spot checks** per year at both intervention and control schools that should be aligned to the same timing and duration as the previous years' spot checks. When a spot check is undertaken, projects should count the number of girls in the classes and compare this to the school register taken for that day. The purpose of these spot checks is to verify attendance data from the school registration system.
- Data collected by **household surveys** allows to triangulate attendance rates and verify data accuracy. It provides a self-reported measure of attendance through questions such as "*since the start of the most recent school year, has [girl] attended her main school on most days that the school was open?*"

As pointed out by the FM, collecting data on attendance is challenging since many schools do not have registers. Moreover, when there is a register, it is often not used regularly or it is not completed accurately, especially under teacher performance-pay systems or when government funding is linked to attendance rate. This undermines the reliability of data collected.

In order to establish a high degree of confidence in the reporting on attendance, the FM and the EM also encouraged IW projects to ensure that attendance data collected is independently verified by IW projects' independent evaluator and set attainable targets for additional improvements to attendance over the project period. Through the midline review process undertaken by the FM, many projects showed a significant deviation between findings from spot checks and school registers. Where school registers have been deemed unsuitable for reporting, spot checks have often been relied upon as a primary source, despite the limited number often carried out by projects and evaluators.

Finally, improving attendance data quality (which a few projects have tried to achieve in their intervention schools) can also reduce attendance levels as attendance lists get more accurate, in comparison to control schools where attendance recording remains poor and often inflated.

[61] Fund Manager for the GEC (June 2013), *The Girls' Education Challenge – Attendance guidance*.
[62] Fund Manager for the GEC (September 2016), *Measuring Attendance on the GEC: methods, challenges and results*.

***The GEC requirements did not specify that IW projects should provide enrolment information**, unless projects had a specific focus on interventions aiming at specifically improving enrolment and/or retention. As a consequence, the evidence base for these two outcomes found across the IW and presented in this section is more limited compared to learning outcomes.*

*With regards to attendance, it is likely that the questions measuring attendance in the household survey are not sufficiently sensitive to pick up small changes in attendance. At the same time, projects have equally struggled to measure attendance reliably, using spot checks and school registry data. Poorly kept student records **hamper the reliability of both approaches**.*

Description of available data

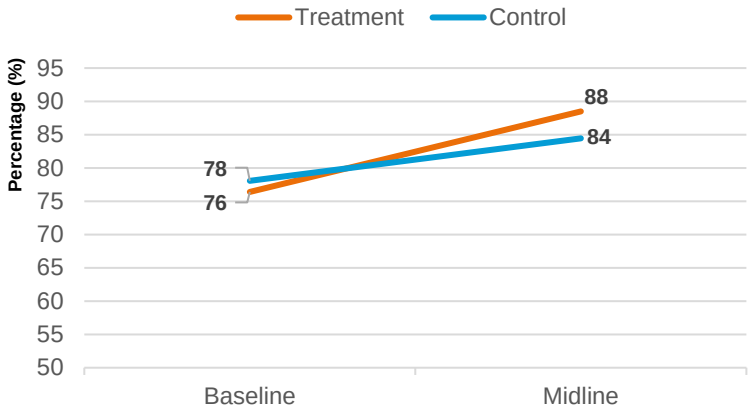
Of the 19 IW projects, the number of projects providing information for being-in-school indicators is as follows:

- Attendance: 13 projects
- Enrolment: 9 projects

3.3.1 What effects has the IW had on enrolment?

At midline, across the nine projects reporting enrolment data, the average improvement is 12 percentage points (versus six percentage points in control areas)

Figure 14: Average enrolment rate between baseline and midline, treatment vs. control (nine projects)[63]



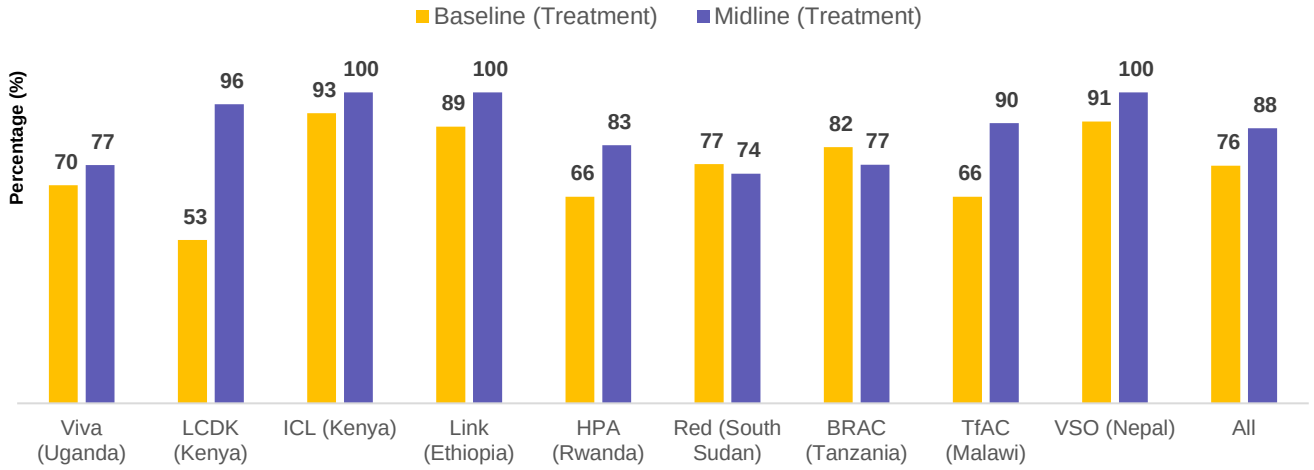
On average, enrolment improved from baseline to midline. It increased by 12 percentage points in the treatment group and by six percentage points in the control group, which suggests that those nine projects had a positive impact on girls' enrolment.

Three projects in particular, two of them focusing on school facilities improvement, have had a strong impact on enrolment rates

At project level, the situation is nuanced. For most projects, enrolment rates in the treatment group stagnated or slightly increased. On the other hand, there has been a strong increase in enrolment for three projects: LDCK (Kenya) where enrolment rate nearly doubled, and HPA (Rwanda) as well as TfAC (Malawi) with an increase of 27 percentage points and 33 percentage points respectively.

[63] With no statistical test conducted on enrolment data, **we cannot say whether these observed effects are statistically significant**. These findings only reflect the evidence presented by nine projects (reporting enrolment figures).

Figure 15: Average enrolment rate between baseline and midline, in treatment groups, by project (nine projects)



Two of these projects have in common a focus on **school infrastructure**. LCDK (Kenya) focuses on school renovation in order to extend facilities access to disabled girls, while HPA (Rwanda) builds compost toilets and washing facilities. As for TfAC (Malawi), the project works on making schools safer for girls through the institutionalisation of child protection policies. For a detailed discussion of the effectiveness of interventions, refer to Section 3.4.

A comparison with available national enrolment rates of girls in primary schools provided by UNICEF[64] (Table 15) shows that most projects (except for ICL (Kenya), Link (Ethiopia) and Red (South Sudan)) work in districts were the enrolment rate at baseline is lower than national figures. This potentially suggests that projects are working in contexts where girls are particularly marginalised. However, enrolment figures should be interpreted with caution, as measurement techniques and data quality differ considerably.

Table 15: Comparison of IW project enrolment rates to national data (nine projects)

Enrolment – Comparison to national data	Viva	LCDK	ICL	Link	HPA	Red	BRAC	TfAC	VSO
	Uganda	Kenya		Ethiopia	Rwanda	S. Sudan	Tanzania	Malawi	Nepal
Baseline (treatment only)	70%	53%	93%	89%	66%	77%	82%	66%	91%
Midline (treatment only)	77%	96%	100%	100%	83%	74%	77%	90%	100%
UNICEF data – 2009-2013[65]	92%	83%		78% (UNESCO)	97% (UNESCO)	34%	98%	100% (UNESCO)	97%

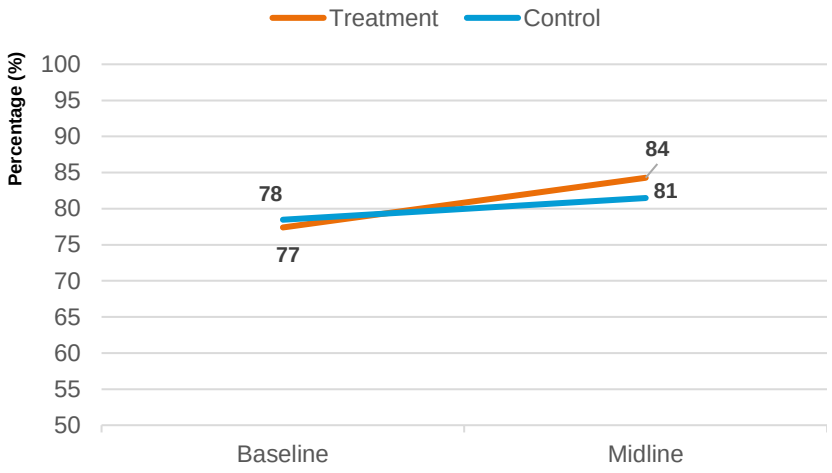
3.3.2 What effects has the IW had on attendance?

At midline, across 13 projects reporting attendance data, the average improvement is seven percentage points (versus three percentage points in control areas)

On average, the attendance rate only increased slightly from baseline – 77 percent in treatment groups and 78 percent in control groups – to midline – 84 percent in treatment group and 81 percent in control group. This moderate improvement in both groups can be explained by the relative high values of the attendance rate at baseline, as well as the difficulties in measuring attendance accurately.

[64] Education data provided by UNICEF: http://data.unicef.org/resources/the-state-of-the-worlds-children-report-2015-statistical-tables/ Accessed 5 October 2016.
[65] We use UNESCO data when UNICEF data was not available. UNESCO data corresponds to the Total Net Enrolment Rate, Primary (female, %), that is the total number of students of the official age group for a given level of education who are enrolled in any level of education, expressed as a percentage of the corresponding population. http://data.uis.unesco.org/.

Figure 16: Average attendance rate between baseline and midline, treatment vs. control (13 projects)[66]



There are large disparities in data quality for attendance

Across the 13 projects which reported data for attendance, five projects have a quality rating of two out of five or less[67] (Table 16). Although the attendance rate of the treatment group remains unchanged in most of the projects, a moderate increase is observed for Viva (Uganda), Raising Voices (Uganda) and TfAC (Malawi) after two years of implementation. In addition, for PEAS (Uganda) the attendance rate has doubled, which can potentially be explained by the extremely low levels at baseline (and a secondary school attendance rate standing at 19 percent at the national level). It is important to note that PEAS (Uganda) attendance data received a poor quality rating (two out of five).

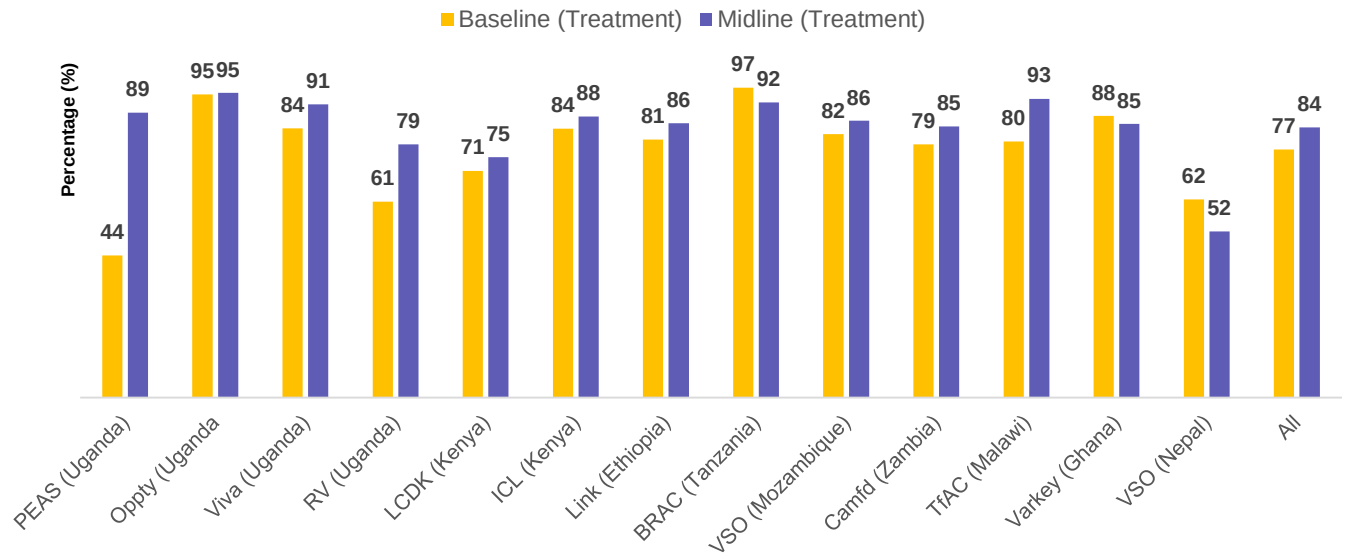
In contrast, the VSO's (Nepal) attendance rate has diminished by ten percentage points between baseline and midline, suggesting that the natural disaster which occurred in April 2015 affected girls' ability to attend school in the districts covered by the project.

Table 16: Data quality and comparison of IW project attendance rates to national data[68] (13 projects)

Attendance – Data quality and comparison to national data	PEAS	Oppty	Viva	RV	LCDK	ICL	Link	BRAC	VSO	Camfd	TfAC	Varkey	VSO
	Uganda				Kenya		Eth	Tan	Moz	Zam	Mal	Gha	Nepal
Baseline	44%	95%	84%	61%	71%	84%	81%	97%	82%	79%	80%	88%	62%
Midline	89%	95%	91%	79%	75%	88%	86%	92%	86%	85%	93%	85%	52%
Data quality	2	3	4	4	2	2	3	1	2	4	3	3	3
UNICEF data for primary school (2009-2013)	19% (secondary school)	81%			88%		65%	82%	77%	72%	86%	74%	91%

[66] With no statistical test conducted on attendance data, **we cannot say whether these observed effects are statistically significant**. These findings only reflect the evidence presented by 13 projects (reporting attendance figures).
[67] Data were rated from 1 (very poor quality) to 5 (comprehensive) by the Fund Manager.
[68] It is important to note that UNICEF attendance rate definition does not exactly correspond to a number of days attended in percentage. UNICEF defines attendance rate as the "*number of children attending primary school who are of official primary school age, expressed as a percentage of the total number of children of official primary school age*" without defining what "*attending school*" means. As such, the comparison with IW projects' attendance data should be interpreted with caution.

Figure 17: Average attendance rate between baseline and midline, in treatment groups, by project (13 projects)



Projects which developed facilities at school show higher improvements in attendance

In terms of improvement in treatment group compared to control group, most of the projects demonstrate a moderate impact, and only three projects show an improvement above ten percentage points: PEAS (Uganda) with 19 percentage points, LCDK (Kenya) with 12 percentage points, and Link (Ethiopia) with 12 percentage points. All of these projects have developed facilities at schools such as sanitary facilities for girls, or renovations (e.g. ramps and windows) in order to improve access for disabled girls.

For a detailed discussion of the effectiveness of interventions, refer to Section 3.4.

Key findings – What impact has the IW had on enabling marginalised girls to be in school and learn?

Based on 16 projects having submitted midline literacy test scores for both treatment and control group, findings suggest that the **effect of IW interventions on girls' literacy at midline is relatively low**. Over a period of two school-years, only seven projects show a significant improvement in literacy beyond that shown in their control groups. For projects using comparable tests and units (10 out of 16 projects), the baseline-to-midline improvement amounted to 16 words per minute on average in treatment groups (15 wpm when adjusted for the number of girls reached), which is three words per minute above control groups' scores.

The difference in changes in literacy scores between treatment and control groups is relatively low. Working with low levels (Grades 1 to 4) was not linked to a higher rate of improvement in reading fluency. For instance, PEAS (Uganda) (working with secondary-school girls only) and Viva (Uganda) (working across all grades) had the highest average reading fluency scores at baseline (81 and 50 words per minute respectively), and achieved the largest increase at midline (by 24 and 28 words per minute respectively).

For projects that implemented interventions with in-school and out-of-school girls, **out-of-school girls' literacy scores showed greater improvement than the scores of in-school girls**.

IW projects have shown a **small impact on numeracy at midline**. While projects have generally shown an improvement in numeracy scores since baseline, only five projects showed a difference in improvements in numeracy between treatment and control groups that was statistically significant. For the four projects that worked with both in-school and out-of-school girls, **numeracy scores of out-of-school girls in the treatment group increased while the scores fell for girls in the control group**. This suggests that interventions with out-of-school girls were successful in maintaining and improving their numeracy skills. On the other hand, in-school girls from treatment and control groups had nearly identical scores at baseline and midline, suggesting that these four projects had little impact on numeracy for in-school girls.

On average, **enrolment and attendance improved from baseline to midline**. Enrolment increased by 12 percentage points in the treatment group and by six percentage points in the control group, which suggests that the nine projects who report enrolment data had a positive impact on girls' enrolment. Across the 13 projects reporting attendance data, the average improvement is seven percentage points (versus three percentage points in control areas).

Lessons learned

- **Girls' learning in treatment areas improved overall from baseline, but this improvement is not significantly larger than the improvement achieved by girls in control areas**. It is consistent with findings of Section 3.1 that target communities have been more exposed to education-related activities at midline than at baseline, but that control areas appear to have been exposed to a range of (GEC or non-GEC) education interventions as well. This phenomenon can be explained by a range of effects including the actual limited scale of impact achieved by IW projects, the presence of GEC and non-GEC actors in treatment and control communities, or potentially poor sampling.
- **IW projects had a positive effect on the learning outcomes of out-of-school girls**. This subgroup displays an improvement over and above change observed in control areas. Projects working with in-school girls have not displayed similarly strong effects on learning outcomes, for which there are a number of possible explanations. It is possible that interventions with in-school girls did indeed have a positive effect on learning outcomes, but these effects are hidden by the positive effects on learning outcomes in the control group caused either by the project's spillover effects, other project interventions in the area or other GEC projects' spillover effects.
- More **robust data must be collected by projects in order for conclusive findings related to changes in enrolment and attendance rates** to be drawn. The difficulty of collecting data around these two outcome indicators has been outlined by the FM and by projects at baseline, and remains an issue at midline.

3.4 What has worked, why and with what effects?

IW projects aim to address a range of barriers to girls being in school and learning effectively.

Key areas emerged from the analysis of barriers to girls' education, **categorised into two groups, proximal and indirect barriers** (refer to Figure 1 and Figure 2 in Annex D). To assess intervention effectiveness, we follow the mapping of interventions (Annex C) to present projects' findings about the effectiveness of their interventions[69] on the barriers identified in projects' areas.

For a detailed presentation of the methodology and a comprehensive list of the barriers, refer to Section 2.2.1 (Measuring changes in barriers to girls' education and assessing the effectiveness of interventions).

For a more detailed analysis of intervention effectiveness including summary tables for each intervention, refer to Annex F.

3.4.1 What effects has the IW had on barriers to girls' education and with what impact on learning and being in school?

In this section, we report on the following barriers and thematic areas, by order of importance with regards to their impact on girls' education across the IW:

- Poverty;
- School-related factors;
- Girls' aspirations and decision-making (early marriage);
- Negative attitudes towards girls' education; and
- Violence and safety.

Poverty

Poverty factors, namely the cost of schooling and domestic responsibilities, are still the primary barriers to girls' education at midline across IW projects.

Over a period of two school-years, IW interventions have positively addressed the effects of school costs on girls' participation in education, mainly through the provision of in-kind support and by facilitating access to scholarships from the government or other organisations. However, it is unclear to what extent income-generating activities have had an impact on parents' ability to send their girls to school.

Most importantly, projects have not been successful in reducing girls' domestic responsibilities, which continue to prevent girls from attending school and doing their homework, especially as girls get older and transition to secondary school.

While a number of projects observed an increase in attendance as a result of interventions aiming at tackling poverty, only one project could demonstrate an impact on learning outcomes.

All 19 IW projects identified poverty and livelihood issues as key barriers to girls' education. This includes the **affordability of school fees and learning materials** (e.g. textbooks, uniforms), as well as livelihood arrangements that can make it difficult to attend school regularly and find time to study. This may be the case, for instance, where girls spend a significant share of their day doing **household chores**, caring for other family members, or **working outside the house**.

What has changed since baseline?

At midline (Table 1 in Annex F), projects reported a positive change around the cost of schooling (five projects) and girls having to engage in income-generating activities (one project). IW projects found no change (or presented

[69] We indicate the origin of the findings by referring to individual Project Midline Evaluation Reports and/ or Outcome Spreadsheets (for cases in which outcome data did not validate projects' claims). Where possible, we also triangulate projects' findings using the existing literature relating to intervention effectiveness for girls' education.

inconclusive evidence) for all other poverty-related barriers (such as significant housework commitments or inability to afford basic needs). No projects presented evidence that shows that poverty has worsened as a barrier to girls' education in project areas.

Across the window, we find that household chores in particular have an effect on girls' attendance and learning as girls grow older. Few projects seem to have been successful in changing this trend.

What have projects done since baseline?

As shown in Table 2 in Annex F, 15 projects tackle poverty and livelihood issues as a core part of their theory of change, through one or more interventions. Ten projects are providing in-kind support in the form of school kits, uniforms, textbooks, stationary or menstrual supplies. Nine projects have engaged families in income-generating activities[70] and three projects are providing loans and savings.

Although IW projects do not directly fund scholarships for girls or cash transfers to households, LCDK (Kenya) and VSO (Nepal) both managed to leverage support from other stakeholders and **access scholarships or financial support from other sources**. For instance, LCDK (Kenya) enrolled 124 disabled girls with a government cash transfer programme which provides financial resources to support disabled children. VSO (Nepal) liaised with another partner working in the same area (Children for Tomorrow), a scholarship programme based on academic merit and parents' socio-economic situations.

Since the GEC is an education rather than a livelihoods programme, **removing such structural barriers and alleviating severe poverty is beyond its mandate and capacity**. However, we can measure whether projects have been able to help families reallocate resources or bridge gaps in such ways that enable them to send their girls to school. We can also assess whether the burden of household chores and livelihood activities on girls has decreased since baseline, as a result of families prioritising education.

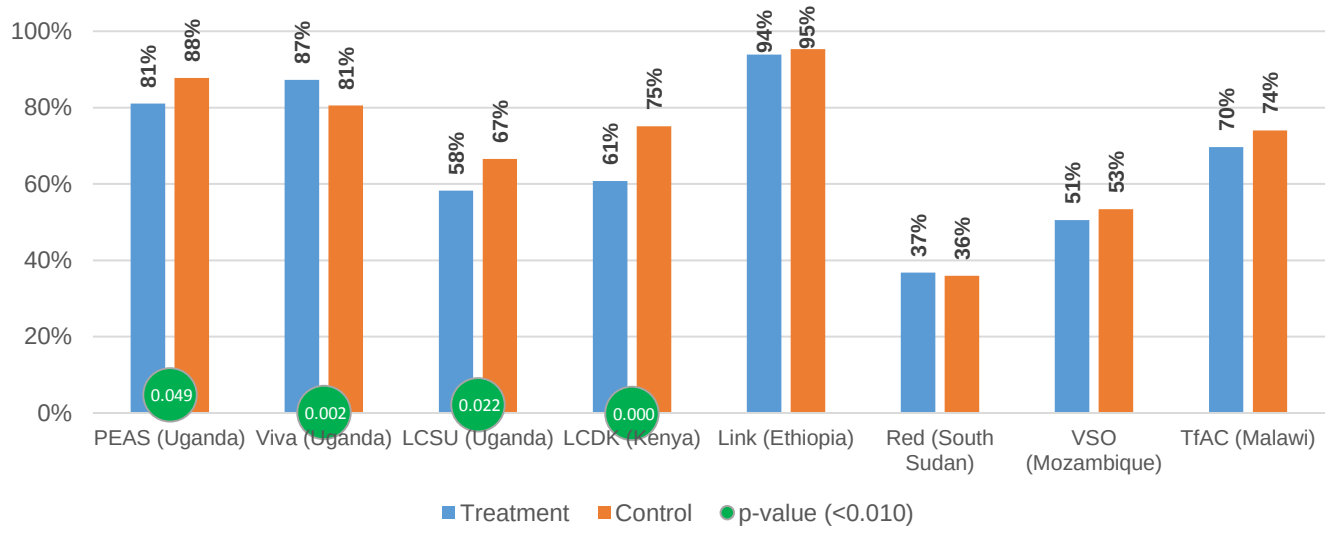
Cost of schooling: How have interventions brought about change? For whom? With what limitations?

Projects' evidence shows that the **cost of schooling** has lessened as a barrier in five project areas (Table 1 in Annex F). Projects present data from household surveys to illustrate this decrease in a number of ways: through the number of families who cite school fees as a reason for dropping out or not enrolling; the number of families having the economic resources to meet educational spending needs; or through the level of other schooling costs (uniforms, textbooks, etc.).

Project data reanalysis reveals that caregivers perceive that it is difficult to afford schooling for girls (Figure 18). For seven out of eight projects with this variable in their household survey data[71], more than a half of the caregivers interviewed at midline believe that schooling for girls is difficult to afford. The difference between treatment and control groups at midline is statistically significant for four projects. For LCSU (Uganda), PEAS (Uganda) and LCDK (Kenya), concerns about affording schooling for girls is lower in treatment groups than in control groups at midline.

[70] Box 1 in Annex F presents a detailed account of the different kinds of income-generating activities across IW projects.
[71] Refer to Table 2 in Annex D.

Figure 18: Perception that it is difficult to afford for a girl to go to school (Reanalysis from Project Datasets)



In-kind support interventions have reduced the cost of schooling (other than school fees) for girls

While providing an incentive for out-of-school girls to return to school, the distribution of **school kits** may not have a durable effect on girls' ability to stay in school and afford school-going costs in the future. Mercy Corps (Nepal) for instance explains the decision to provide re-entrance packages as particularly relevant for girls from economically marginalised families who drop out due to school-going costs, but also acknowledges that this is **not a sustainable solution**, yet "*recognising the large impacts this extra year can have on especially vulnerable girls' life chances*". Similarly, financial support to afford school-related costs provided to girls at risk of dropping out seems to be limited as a tool to keep girls in school, as the difficulties they face to stay enrolled may be greater than the sole affordability of schooling items.

In contrast, among the list of items provided as part of in-kind support activities, **sanitary pads** appear to have the greatest impact on reducing the cost of schooling and improving attendance. After puberty, providing sanitary products enables girls to address yet another cost of schooling. Girls and teachers both mentioned the **reduced stigma and teasing** girls have been experiencing at school due to not being able to 'manage' menstruation.

Nevertheless, there are limitations to the provision of in-kind support. Beyond the short-term financial relief that school packages or the distribution of sanitary pads brings to girls and their parents, discontent has been expressed in communities around the **targeting of girls over boys**. Handing out free items easily creates jealousy and tensions within communities, and can lead to perverse incentives for non-recipients. For instance, in-school girls were reported to be dropping out of school for a brief period of time in order to obtain back-to-school packs (TfAC (Malawi)).

It is unclear whether ability to pay school fees has improved for households involved in income-generating activities

In contrast with in-kind support, interventions such as promoting income-generating activities with parents and caregivers[72] can increase household income and eventually lead parents to invest in girls' education (school fees and other costs).

Only three out of nine IW projects have had a positive impact on attendance as a result of promoting or facilitating income-generating activities among their target communities. An important finding relates to the **type of income-generating activities** households become engaged with. ICL's (Kenya) midline research shows that economic empowerment activities have resulted in higher incomes in Mombasa (non-agricultural activities) as compared to Laikipia, where income-generating activities focused on low-and-slow-return activities such as agriculture (livestock and farm produce). Similarly, BRAC (Tanzania) encouraged parents to either work in agriculture or start a small-scale business through access to microfinance institutions – with mixed results, depending on whether parents

[72] For a detailed analysis of the different approaches taken by projects to promoting income-generating activities, please refer to Annex F.

showed interest in establishing a business. Income-generating activities have therefore not proven to be effective in increasing incomes for *all* households benefiting from those interventions.

Including girls in income-generating activities (Viva (Uganda) and HPA (Rwanda)) has also had mixed effects on increasing incomes and enhancing girls' ability to go to school. While potentially leading to an increase in income levels for selected households, HPA's (Rwanda) Mother-Daughter Clubs did not facilitate out-of-school girls' return to school. 75 percent of adolescent girls chose not to enrol because they were overage, had children of their own and/ or needed to earn a living for their households, using the managerial skills they acquired as part of the Mother-Daughter Clubs. Teaching girls entrepreneurial skills and engaging them in raising the funds they need to get back to school and stay in school (Viva (Uganda)) can also be a mixed blessing: girls mention that skills learned through businesses could help them have useful careers after they graduate, but such involvement in income-generating activities while being of school-age can also divert girls' attention from learning core skills such as literacy and numeracy, and potentially lead them to drop out of school. BRAC (Tanzania) for instance notes that students involved with livelihood activities have difficulties attending day-long learning sessions in BRAC's study clubs, which experienced a high dropout rate of 'working' students.

Economic interventions at the school level, with profits being used as a direct funding source for schools (HPA (Rwanda)), may be the most promising income-generating intervention. 85 percent of the schools have created school action plans/ budgets on how to spend these funds to make schools more girl-friendly and cover the school fees for marginalised girls in the community. Focus group discussions with parent-teacher associations, teachers and students involved in school businesses found a high level of ownership about the initiative.

Increasing incomes may not lead to an increase in spending on girls' education

Whether increased income led to an increase in spending on girls' education has been hard to evidence for projects. Some evidence presented in the Project Midline Evaluation Reports suggests that parents reported that they had fewer difficulties in paying school fees at midline compared to baseline, but **without establishing a clear causal link with an increase in available income**. Among nine IW projects implementing income-generating activities[73], only one project provided such evidence: ICL (Kenya) showed that 76 percent of parents (in Mombasa) reported that they were paying school fees and 71 percent paying them on time, compared to only 49 percent paying fees at baseline. Incidentally, 77 percent of parents receiving economic empowerment training cited increased spending on girls' education as resulting from increased income.

It is also unclear whether the self-reported affordability of school fees and other school costs can be linked to income increase/ poverty reduction in the household, or whether parents chose to invest more in girls' education as a result of exposure to other IW projects' interventions, such as attitudinal and behaviour-changing activities. An interesting finding from BRAC (Tanzania) demonstrates that fathers are generally more engaged in economic activities than mothers, but that they are less likely to "*pay attention to the education of children*". Consequently, increased incomes may not automatically translate into increased spending on (girls') education, which remain highly dependent on household choices (and constraints) and parents' attitudes towards education.

Access to scholarships had the most direct, positive effect on parents' ability to afford school fees and other school-going costs

LCDK (Kenya), LCSU (Uganda) and Mercy Corps (Nepal) seem to have successfully brought down the cost of school by facilitating access to scholarships from the government or from other organisations. In terms of affordability, LCDK (Kenya) project's respondents at midline were less likely to report difficulties in affording schooling for their girls than parents in the control areas, after the project successfully enrolled target girls in County Government bursary schemes being allocated to the disabled.

By contrast with income-generating activities, providing access to scholarships implies that the extra available funding is **earmarked towards paying school fees and other school-going costs**. In addition, in situations in which such scholarships are already available, funded by the government or other organisations and girls are eligible to apply, parents' ability to afford sending their girls to school seems almost guaranteed to be sustained, even after the end of project implementation.

[73] Box 1 in Annex F presents a detailed account of the different kinds of income-generating activities across IW projects.

Providing loans and promoting savings are starting to show positive effects on tackling barriers related to the cost of schooling

Only three IW projects have engaged with loans and savings interventions, making it difficult to assess the effectiveness of this particular type of intervention. Findings could not be generalised across the IW. We chose to focus on the most developed and accomplished 'loans and savings' model, implemented by Opportunity (Uganda), which is the only of these three models to have had an impact on learning at midline. Opportunity (Uganda) provides school fees/ tuition loans to parents, savings accounts to girls and education-related insurance. According to the project, school fee loans have enabled parents and girls to directly and indirectly improve learning.

Some parents have taken advantage of the school loans to transfer their children from low performing schools to higher performing private schools, or to schools closer to their home, thereby improving learning and attendance. This suggests that, in addition to enabling girls to attend school more regularly, Opportunity's (Uganda) project model successfully **provides incentives for parents to send their girls to schools where they are more likely to learn**, and to learn more, since the quality of education (and eventually, the return on education investment) is at stake for those households having accessed a school fee loan.

School improvement loans, as opposed to school fee loans, have had an even greater effect on learning outcomes, especially literacy improvement (Opportunity (Uganda))[74]. These loans, made at the school level, support private school owners to invest in making improvements to the learning environment. As private schools relying on a low fee structure, Opportunity's (Uganda) target schools often have to deal with overcrowded classrooms, poor sanitation and shortage of school supplies. Midline research shows that school loans have been used to renovate classrooms, meaning that teaching aides like charts could be displayed on the walls. Girls also reported that the building of additional classrooms contributes to less congestion and better concentration in lessons, which possibly explains the improvement in learning outcomes. The appointment of additional teachers may also explain the impact on learning, as well as schools having invested in building teacher dormitories to ensure teachers are more available to students.

Girls' domestic duties: How have interventions brought about change? For whom? With what limitations?

We find at midline that **household chores** in particular have a negative effect on girls' attendance and learning as girls grow older. However, few projects seem to have been successful in changing this trend.

Girls' domestic responsibilities continue to be the second most important poverty barrier preventing girls from attending school and doing their homework

None of the 13 projects reporting on this barrier are able to evidence a reduction in girls' housework commitments at midline. Despite a large majority of IW projects stating that girls' housework commitments are a key barrier to girls' education at baseline, **only a few projects report to have actively and/ or directly tried to address this issue**. At midline, girls still report that domestic chores limit the time that they have available for school work, sometimes also causing them to miss school. Link's (Ethiopia) baseline research revealed that 83 percent of girls indicate that doing household chores interferes with their school work. At midline, only five percent of girls report that parents have reduced their chores since baseline. Mercy Corps (Nepal) found that 13 percent of caregivers report that girls typically spend half of their average school day doing chores, and that they are sometimes late for school due to their morning chores while only be allowed to sit down to do their homework once evening chores are completed[75].

Reanalysis of projects' datasets at midline (Figure 19 and Figure 20) reveals that target girls from Link (Ethiopia), Red (South Sudan) and Opportunity (Uganda) spend a large share of their days on household duties and/ or household duties prevent them from attending school. UNICEF data[76] shows that Ethiopia is especially affected by girls having to do household work in their families (64% of the day in the treatment group according to Link's (Ethiopia) data).

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[74] Upon disaggregating results across the two main outputs, school improvement loans and school fee loans, Opportunity (Uganda) observed that girls from the school survey (benefiting from school improvement loans) performed better (a 17 wpm net effect over and above the control group) than girls benefitting from school fee loans (a four wpm net effect over and above the control group).
[75] For a detailed analysis of girls' domestic responsibilities, please refer to Annex F.
[76] http://qz.com/807429/unicef-data-shows-that-girls-spend-a-disproportionate-amount-of-time-on-household-chores-creating-gender-inequality-from-an-early-age/
https://data.unicef.org/wp-content/uploads/2016/10/Harnessing-the-Power-of-Data-for-Girls-Brochure-2016-1-1.pdf.

Figure 19: Percentage of day (excluding time spent sleeping) spent by girl on household duties (Reanalysis from Project Datasets)

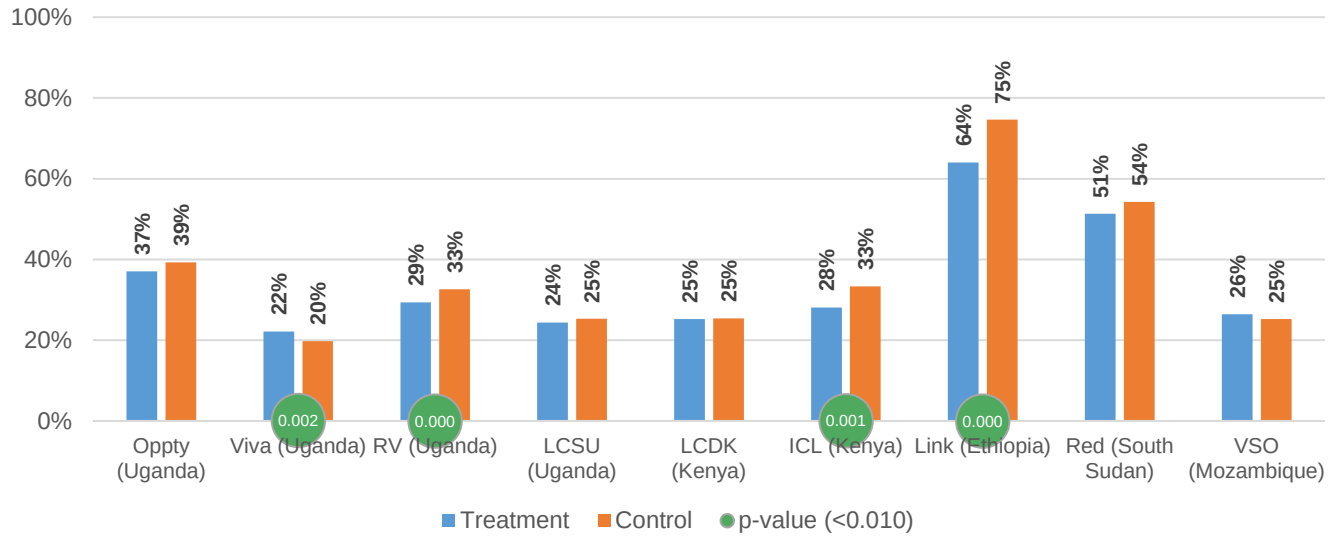
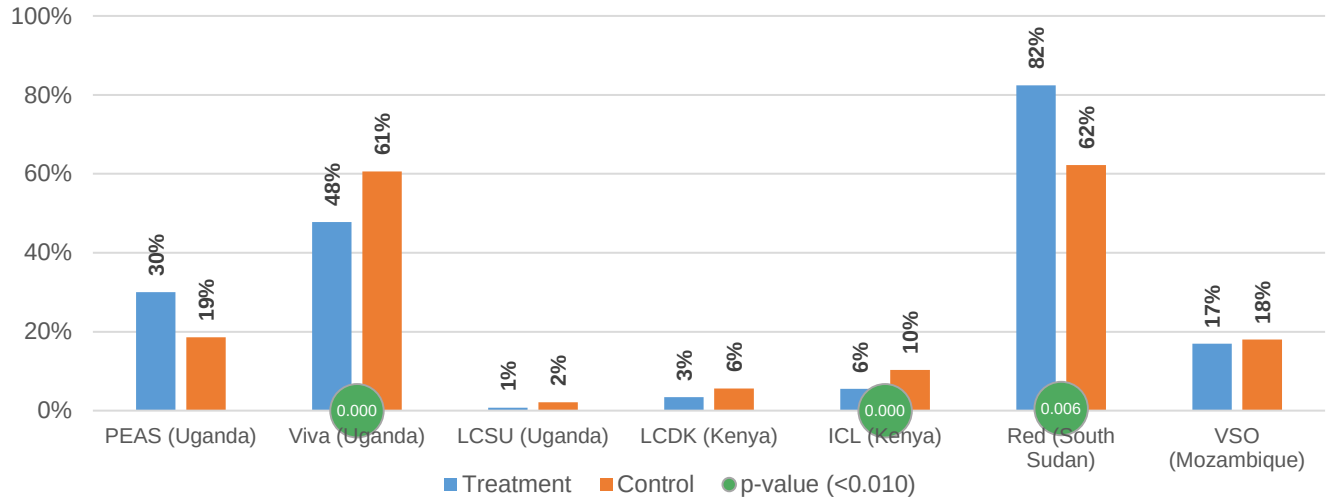


Figure 20: Percentage of caregivers reporting that household duties prevent girls from attending school (Reanalysis from Project Datasets)



As girls get older, domestic responsibilities increase, putting more pressure on girls' ability to attend school and achieve good grades

PEAS (Uganda), which works with secondary school girls, is especially affected by girls having a large share of domestic responsibilities in the household. Through community-based awareness activities, the project's community engagement work has focused on sensitising communities to barriers to girls' participation in schooling. Nevertheless, PEAS (Uganda) acknowledges that broad-based community outreach has not had enough of an effect, especially on the distribution of chores at the household level, which **takes place outside the school environment**.

Similarly, TfAC's (Malawi) midline research shows that girls who have difficulties completing their homework due to house chores perform worse on both EGRA and EGMA tests. However, the project found that their attendance does not seem to be affected, which suggests that girls, after a certain age, facing a larger share of domestic duties in the household, are simply unable to study and complete their homework to progress normally in school. It is also

harder for projects to influence what is happening within the household, and to have an impact, for instance, on the extent to which duties are assigned to girls or boys, and whether these duties hinder on study time or not[77].

Have changes in barriers had an effect on education outcomes (attendance, learning)?

Identified as a key constraint to girls achieving education outcomes, poverty factors have been at the centre of the design of most IW project designs, with **15 projects engaging in economic interventions** aiming to offset the cost of education (Table 3 in Annex F). While a number of projects observed an increase in attendance as a result of those interventions, **only one project could demonstrate an impact on learning outcomes** (Opportunity (Uganda)).

While there is strong evidence that addressing the cost of schooling is positively linked to improved attendance for girls, it is unclear how IW projects aim to improve learning for those girls, unless they directly work with school-related factors. By contrast, Opportunity's (Uganda) 'loans and savings' model, in addition to enabling girls to attend school more regularly, successfully provided incentives for parents to send their girls to schools where they are more likely to learn, since the quality of education (and eventually, the return on education investment) is at stake for those households having accessed a school fee loan.

The presence of other, less reported, poverty-related barriers such as health and hunger-related factors and/ or the lack of educational resources at home shows the complex and context-specific nature of the multidimensional poverty girls in project areas are experiencing. No positive changes have yet been achieved in relation to those factors.

School related-factors

Over a period of two school-years, school facilities and teachers' pedagogical skills have improved as a result of IW project interventions.

Improved school infrastructure has enhanced school accessibility and girls' attendance, and the provision/ rehabilitation of sanitation facilities have reduced stigma and increased girls' confidence. However, safety on the way to and from school is still an issue.

Projects found that the supply of school materials had a greater impact on learning when coupled with teacher training in the use of new materials. Teaching teachers 'how to teach' generally improves teachers' pedagogy and delivery style, but does not always translate into learning improvements for girls. We found evidence that on-the-job trainings for teachers, through feedback, mentoring and performance monitoring, is associated with better learning for girls.

By contrast, most projects have been unsuccessful in addressing issues such as teacher absenteeism and poor school management – in some cases, as a result of a limited understanding of the education system in the countries in which projects operate.

Overall, effective intervention models have in common that they sought to address multiple constraints to learning, including low level of training among teachers, lack of materials and lack of structured content.

All 19 IW projects mentioned issues with the quality of schooling as a key barrier to girls' education. Such issues included **poor teaching practice and pedagogy**, frequent teacher absence, lack of qualified teachers and inappropriate curriculum.

Projects also found that a **lack of adequately equipped classrooms** hampers learning in school. Classrooms may lack solid floors or ceilings to protect children from the weather; access to electricity and water; sufficient desks or seating to children. Toilets may not be lockable, or there may only be common toilets for boys and girls.

Finally, fewer projects explicitly stated in their theories of change that **poor school governance** was a barrier to girls' education. This included a lack of planning and accountability, as well as poor structures for joint decision

[77] For a detailed analysis of parents' and boys' attitudes in the household, please refer to Annex F.

making between teachers, parents, and other community stakeholders through parent-teacher or school management committees.

Box 5: Types of programmes addressing the constraints faced by schools and teachers

A large share of IW projects' budgets (40 percent on average)[78] has been invested in addressing the constraints schools and teachers face in their efforts to improve the classroom environment and consequently girls' learning outcomes.

3ie's review[79] highlights that "*traditionally, education programmes and policies have focused on improving outcomes by expanding the quantity and quality of schools and teachers. 'Hardware' in the form of buildings and books has been provided based on the assumption that 'if we build it, children will come and learn'. In the past few years, there has been a gradual shift towards improving the 'software' of learning, meaning more investments in programmes that emphasise pedagogy, curriculum development and teachers' training*".

Across the IW, projects have generally implemented a mix of 'hardware' and 'software' interventions, with a particular focus on teacher training interventions (16 percent of total budget), infrastructure building/ improvement (12 percent) and engagement with local or national education authorities (six percent of total budget).

What has changed since baseline?

At midline, all 19 IW projects reported on barriers related to school factors (Table 4 in Annex F). The three sub-barriers which are most frequently mentioned are consistent with those from baseline: inadequate school facilities (14 projects), long distance to school (14 projects) and teachers' inadequate pedagogy (13 projects).

In terms of achieving positive change in these areas, projects' midline research shows that teachers' pedagogy has been enhanced across eight projects, while inadequate school facilities have been improved for seven projects. Only five projects provide evidence of reducing/ improving girls' travel to school.

IW projects found limited changes or presented inconclusive evidence for other school-related barriers to education, in particular for teacher absenteeism and poor school management. Evidence of new barriers discovered at midline is presented by HPA (Rwanda) and TfAC (Malawi) in relation to the long distances to school, and by Mercy Corps (Nepal) with regards to high pupil teacher ratios.

What have projects done since baseline?

As shown in Table 5 in Annex F, 13 projects place the **improvement of school infrastructure and resources** at the core of their theory of change. On average, projects primarily allocate funds to school and classroom building/ improvement (seven projects), spend less on textbooks and learning materials (four projects), and only a marginal fraction of their budgets on toilets and WASH facilities (five projects).

Approaches taken by IW projects to improve the **quality of teaching** in schools are similarly diverse. A large number of projects provide skills training to teachers (ten projects), often in combination with gender responsive pedagogy training (seven projects) and inclusive classroom strategies (seven projects). Fewer projects provide peer support and mentoring for teachers, or basic training such as literacy and numeracy training.

School management and governance interventions are implemented by a large number of projects, mainly working with school management committees (SMCs), parents-teachers associations (PTAs) and other stakeholders (14 projects).

[78] PwC (2015), 'Value for money (VfM) metrics on the Girls' Education Challenge – Report on VfM expenditure metrics for the GEC Year 1 and 2: January 2013 – March 2015' and PwC (2016), 'Value for money (VfM) metrics on the Girls' Education Challenge – Report on VfM expenditure metrics for the GEC Year 3: April 2015 – March 2016'. All projects with the exception of PEAS (Uganda), Raising Voices (Uganda), Red (South Sudan), VSO Mozambique, and Mercy Corps (Nepal) provided costing data for Years 1 and 2. To fill in the gaps, for these five projects, we use budget data for Year 3. Amounts of budget spent have been aggregated from different activities and categorised across outputs.

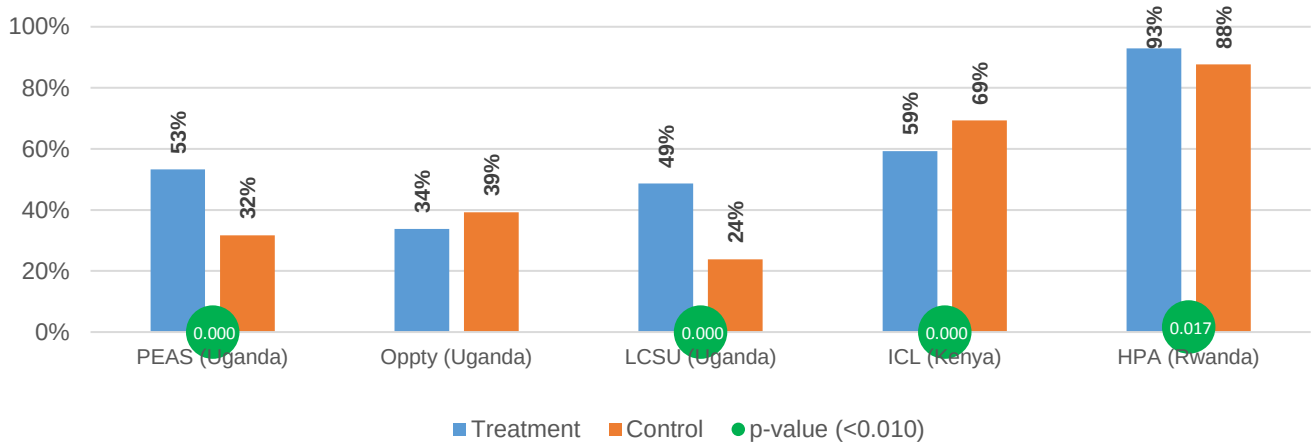
[79] Snilstveit et al. (2016), The impact of education programmes on learning and school participation in low- and middle-income countries, Systematic Review Summary, 7, 3ie.

Infrastructure and resources for schooling: How have interventions brought about change? For whom? With what limitations?

Projects' evidence shows that **inadequate school facilities/ sanitation** has lessened as a barrier in seven project areas and issues related to **long distance to school** have improved in five project areas. Projects present information collected as part of their midline research to illustrate this decrease in a number of ways: through the number of girls reporting confidence and sense of privacy at school when using newly constructed/ rehabilitated sanitation facilities; satisfaction with the availability of school materials; the extent to which assisting devices are reported to have helped girls with disability; or reports of improved experience of personal safety on the way to school.

Reanalysis of project datasets (Figure 21) shows that the proportion of caregivers observing positive changes in school infrastructure is significantly greater in treatment groups compared to control groups, except for ICL (Kenya) (despite one of the project's interventions aiming to improve school facilities) and Opportunity (Uganda), which provide schools with infrastructure improvement grants. For LCSU (Uganda), the difference between treatment and control groups is large (49% in the treatment group, against 24% in the control group). This can be explained by inadequate school facilities for disabled girls in control groups and/ or indicate that the improvements implemented by LCSU (Uganda) in treatment schools contributed to the change in perception around school facilities among caregivers. PEAS' (Uganda) and HPA's (Rwanda) provision of drinking water and washing facilities for girls may also have contributed to caregivers' perceptions around improved school facilities in the treatment group.

Figure 21: Percentage of caregivers reporting that school facilities have improved (Reanalysis from Project Datasets)



Provision/ rehabilitation of sanitation facilities have reduced stigma and increased girls' confidence

At midline, **projects' evidence is generally very positive about menstrual hygiene interventions**, which combine providing sanitary towels with building separate toilets for girls and/ or changing rooms. Through qualitative evidence from girls describing their own experiences, projects (HPA (Rwanda), PEAS (Uganda), LCSU (Uganda), Link (Ethiopia) and Mercy Corps (Nepal)) describe how the provision of separate sanitation facilities for girls within schools has increased girls' confidence and sense of safety as well as privacy at school. PEAS (Uganda) suggests that girls in school with improved sanitation facilities feel that they are less exposed to dangerous situations. Link (Ethiopia) reports that discussions with school management reveal that the improved facilities have worked well in coordination with girls' clubs, where girls have gained the confidence to talk about menstruation and do not view menstruation as something to be ashamed of.

Clear linkages are made between these activities and **improvements in girls' attendance**, particularly from HPA (Rwanda) and Link (Ethiopia). This is in line with 3ie's evidence base, which suggests that the construction of toilets increases enrolment and reduces drop-out rates, with pubescent girls benefiting more substantially when separate toilets are provided for boys and girls.

Limitations to the provision and/ or rehabilitation of sanitation facilities have nevertheless been reported. Mercy Corps (Nepal) provides the example of a school where a separate toilet has been constructed for girls but has remained locked, with girls being forced to continue sharing facilities with boys. In another school, new toilet

facilities do not have any water and are poorly kept, so that girls are unable to use them. **Maintenance of newly built or renovated facilities**, in particular WASH facilities, is crucial to ensure that benefits for girls are being sustained.

Improved school infrastructure and teaching quality enhance school accessibility and girls' attendance, but safety on the way to and from school is still an issue

As evidenced at baseline, long distance to school appears to result in greater girls' absenteeism, mostly as a result of safety issues encountered on the way to and from school[80].

At midline, five projects provide evidence of a positive change in reducing the distance to school (e.g. journey time, mode of transportation, attending nearby school). The evidence supports the rationale behind school infrastructure and teaching quality improvement, as well as catering for specific groups' needs such as disabled girls, as being most effective in addressing issues related to school availability and proximity. As such, safety issues, which were heavily reported upon at baseline, have either become irrelevant as girls get on a bus or attend a nearby school, or still remain an issue for girls at midline. No project naturally set out to address safety issues directly.

Transport to get girls to school is linked with improved school attendance. However, it should be noted that if transport is not organised as part of the school system or as a public service, it is **unlikely to be sustained** in the long term, after the end of the project. Additionally, LCSU (Uganda) also note that their transport service is only accessible to girls who live close to the road, leaving girls who live in less accessible areas without support. It is **unlikely for such projects to delivery results at scale**, unless improvements made to schools and transportation systems are taken up by the education system and extended more widely.

Finally, interventions aimed at addressing distance to school have shown **limited effect on learning outcomes**. The pathway to impact is likely one of several steps, as there may be positive effects from girls' journey to school being shorter, less time-consuming. However, whether girls are able to spend this time studying or doing their homework is unclear. As highlighted by Marcus and Page (2016)[81], most evidence tends to focus on enrolment, retention or attendance with regards to the impact of investments in infrastructure on education outcomes.

The supply of school materials has a greater impact on learning when coupled with teacher training in the use of new materials

At baseline, lack of school materials such as textbooks, exercise books, slates or learning posters had been reported as a barrier to girls' education by seven projects. At midline, three of these projects present evidence of a positive improvement in project schools.

Among those, LCSU (Uganda) and LCDK (Kenya) provide a clear rationale of the added value of distributing school materials (refer to Box 6 in Annex F), in the case of specialised **learning material for children with special needs**. LCSU (Uganda) in particular supported schools to develop accessible learning materials from local materials, in addition to providing equipment such as slates, braille machines and paper. Midline evidence shows that the intervention resulted in improved learning for girls, as teachers were able to adapt their lessons to students' needs. Viva (Uganda) also demonstrated an impact on learning outcomes at midline. The project established a **mobile library**, which visits both Creative Learning Centres and mainstream schools in the project areas and provides access to books to children, in particular to out-of-school girls. At midline, 40 percent of surveyed girls declared that they enjoy learning more because they have access to a library.

We also find evidence at midline that some projects have not been able to influence learning outcomes as a result of providing school materials. For instance, Camfed (Zambia) provided teacher reference manuals and subject workbooks for students. Although more than half the head teachers and teachers cite these learning materials as a major benefit of the project, midline research suggests that **further teacher training in the use of new teaching material is required**. Qualitative research reveals that a large proportion of students are still being taught by copying text from the blackboard, rather than using the new learning materials/ workbooks to engage in interactive learning.

[80] Annex F presents a detailed account of the different approaches taken by IW projects to tackle issues of distance and safety on the way to school.
[81] Marcus, R. and Page, E. (2016), *An evidence Review of School Environments, Pedagogy, Girls' Learning and Future Wellbeing Outcomes*, UNGEI, www.ungei.org.

Box 6: Technology in the classroom and computer-assisted learning – do they improve learning?

Varkey's (Ghana) main intervention is around setting up distance learning in schools ('MGCubed lessons'), during which children are taught English and mathematics for two hours per day, five days a week, by a remote teacher. The distance learning model is supported by high quality digital content and a student-centred pedagogical design, with the aim of addressing the barriers students typically face in Ghanaian classrooms: teacher absenteeism and insufficient time-on-task. The rationale behind technology-assisted, distance learning is to improve the volume of instructional hours students receive, as well as the quality of the instruction itself.

At midline, the project notes that the most *visible* change between the treatment and control schools has to do with the level of classroom resources and technology access – which is a common feature across 'technology in the classroom' interventions. **Visible, new and high performing IT resources** are noticed and commented upon in schools and within communities. In addition, Varkey (Ghana) distributed workbooks to students and teaching and learning materials to teachers, endowing intervention schools and students with further resources.

Varkey's (Ghana) distance learning model has proven successful in terms of reaching their objectives around the **increased volume of instructional hours, as well as enhanced teaching quality**, addressing the issue, among others, of teacher absenteeism. Furthermore, the project has had positive spillover effects on teachers' pedagogy and teaching style, as a result of being exposed to quality teaching during distance learning sessions: over 60 percent of MGCubed teachers in their normal non-MGCubed lessons were observed using good practice methods such as student-centred activities, assessment for learning, group work and peer learning. Student feedback also reveals that 'MGCubed teaching style' has improved compared to traditional teaching:

> "*I like the fact that [the teacher] smiles when she is teaching us."*
>
> *"[The teacher] talks slowly so I understand. I like the use of Dangme*[82] *too.*"
>
> *"Better explanations are given in our MGCubed lessons.*"
>
> Girls' interviews, Varkey (Ghana)

According to Varkey (Ghana), girls also identified that they enjoy the practical aspects of the MGCubed lessons and the teachers' ways of explaining difficult concepts to them.

Impact on learning outcomes

While barriers have been removed and teaching quality improved, the project has been unsuccessful at demonstrating a positive impact (net effect, over and above the control group) on reading fluency. However, **a significant effect can be observed on numeracy scores**. Varkey's (Ghana) midline research suggests that this may be explained by regular teaching being less adapted to teaching maths but still better suited to teach students how to read. Another explanation proposed by Varkey (Ghana) is that their curriculum primarily focuses on developing oral English skills (comprehension and speaking), which means that reading fluency scores may not have captured the full extent of girls' progression. Finally, it is also possible that numeracy skills are easier to improve through distance learning, or that the room for improvement was higher for numeracy than for literacy.

On the other hand, ICL's (Kenya) evidence regarding technology use in the classroom (supply of computers, internet access, and teacher training in the use of ICT) has proven inconclusive. As a lesson learned, the project notes that when introducing technology to a community, piloting is required in order to achieve acceptance and uptake. Whether ICT for learning can positively influence learning outcomes will be answered at endline, as the intervention is rolled out to all participant schools in the project areas.

Limitations

A key constraint with bringing technology equipment in the classroom relates to the security situation in schools. Varkey (Ghana) mentions that at the beginning of the project, school technology equipment came under repeated attack from thieves, resulting in the schools having to provide 24/7 security. These security issues have made it difficult to implement the self-study component of the project, as school facilitators do not find it safe for students to stay in the classroom after dark, for fear of possible robbers' attacks.

[82] Vernacular language in Ghana.

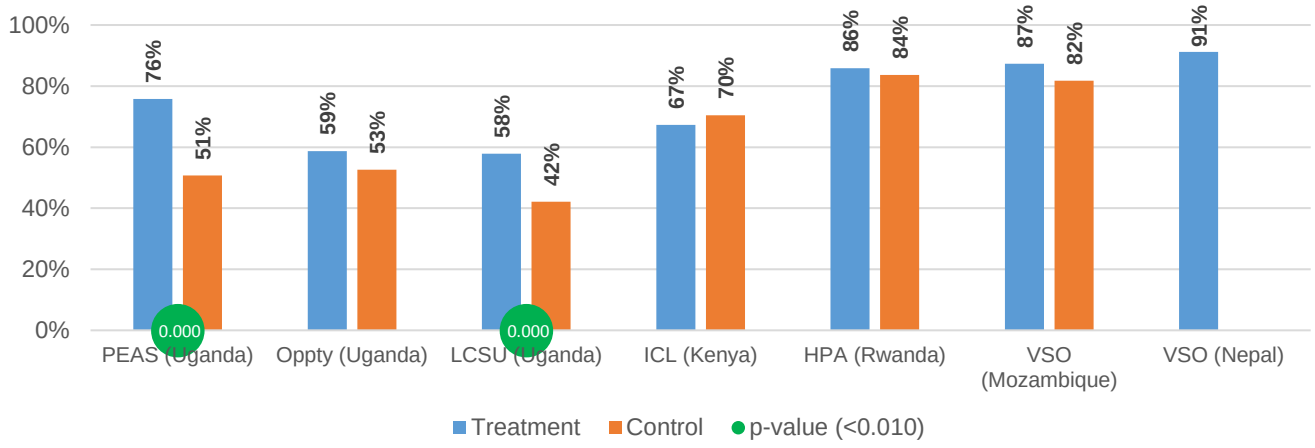
Teacher training and support: How have interventions brought about change? For whom? With what limitations?

Projects' evidence shows that **teacher training and support** interventions have been associated with positive changes in the classroom environment, as well as more equal treatment for girls compared to boys. However, this finding emerges from a number of intervention types: providing skills training, making classrooms more inclusive, improving teachers' pedagogical skills, and more[83].

Importantly, **interventions in relation to training teachers have been cross-cutting** (gender, basic skills, pedagogy, mentoring), such as PEAS' (Uganda) Continuing Professional Development training embedding gender responsive pedagogy and a focus on helping all students access the curriculum, or TfAC (Malawi) implementing skills, gender responsive pedagogy, inclusive classroom and literacy and numeracy training. Finding out which type of training has worked best is challenging as a result of the diversity and specificity of each project's way of designing and conducting training.

Based on the data reanalysed from projects, most caregivers believe that teaching quality has improved (Figure 22). However, this perception is significantly stronger in the treatment groups of two specific projects: PEAS (Uganda) which focused on teacher training, and LCSU (Uganda) which adapted pedagogy to meet the needs of disabled girls.

Figure 22: Percentage of caregivers reporting teacher quality has improved (Reanalysis from Project Datasets)



Teaching teachers 'how to teach' generally improves teachers' pedagogy and delivery style, but does not always translate into learning improvements for girls

At baseline, ten projects had found that teachers were delivering lessons that were **poorly planned**, **lacked objectives** and were **not tailored to the level of the students**. At midline, eight projects have shown an improvement in teachers' pedagogy (Table 4 in Annex F). However, only four projects present evidence that improving teachers' skills in this area can improve learning outcomes for girls (Table 6 in Annex F).

PEAS' (Uganda) school-based Continuing Professional Development model focuses on training teachers 'in the job' rather than via workshops[84], which has shown to improve teaching practices. Viva (Uganda) also provides evidence that in-service teacher training has proven successful in changing pedagogy from teacher-centred to learner-centred classrooms. Both projects[85], as well as Varkey (Ghana), using similar approaches, have increased learning for girls, which suggests that **learning-on-the-job, through feedback, mentoring and performance monitoring** is a model that works,

[83] To shed light on those interventions, we list the different ways in which projects have approached issues related to the quality of teaching in Annex F.
[84] In particular, PEAS' (Uganda) in-service training has included filming teachers in the classroom and enabling them to self-assess their performance as well as receive peer feedback.
[85] Although there is an improvement in learning between baseline and midline, there is no significant difference between treatment group and control groups in PEAS (Uganda).

> "*[…] because it enables teachers to practice making changes on the job, and allows for immediate feedback in a 'real-world' setting, both of which help teachers to learn quicker and embed sustained changes into their teaching practice.*"
>
> Midline Evaluation Report, PEAS (Uganda)

Interestingly, for those projects which have demonstrated an impact on learning, the content of pedagogical training has gone beyond classroom management and lesson planning, and included **concrete teaching strategies** as well as **a rationale behind teaching in a certain way**. For instance, PEAS' (Uganda) model has built teachers' understanding of the different components of literacy (reading, writing, speaking and listening) and raised awareness of the important role literacy plays in driving attainment in all subjects. Similarly, Viva's (Uganda) training model has included teaching reading using phonics, and the training for numeracy teaching used manipulatives, illustrating maths with games and using maths for practical tasks – with positive impacts on girls' learning.

Nevertheless, these training models come with a number of limitations. For instance, Viva (Uganda) notes that girls returning to formal education (as opposed to Creative Learning Centres' education) **struggled with the teaching methods used in mainstream schooling**. While providing training to teachers in the formal school system may eventually be the most sustainable solution, girls supported by Viva (Uganda) face difficulties with adapting back to a system that they have previously dropped out from, suggesting that in the long term, those girls may leave school again. On the other hand, with foundational skills in literacy and numeracy, Viva's (Uganda) girls are also better prepared to cope with the formal school system.

Some teachers are also struggling with changing their teaching style and applying new teaching skills, especially if they have been teaching for a long time (Viva (Uganda)). The project also notes that **changes in teaching styles need management and official support** to be effective and sustained in the school. Similarly, ICL (Kenya) point to the fact that trainings are more effective if head teachers are involved from the beginning. The project decided that for all trainings targeting teachers or the school board, the school head was to receive a prior training, so that they understand the purpose of the training and support their teachers through it.

Finally, the sustainability of these interventions is threatened by the **high rate of teacher transfers** (to government or private schools), and the capacity of IW projects to advocate for the integration of enhanced pedagogy into mainstream teacher training at the national level.

Training teachers to accommodate learning for girls with special needs has proven effective, improving both learning and attendance

LCSU (Uganda) and LCDK (Kenya) both trained teachers with the specific aim of making teachers more responsive to the needs of disabled girls. At baseline, LCSU (Uganda) found that the teachers' training curriculum did not address the needs of children with disabilities, thereby compromising the quality of education received by disabled girls.

At midline, teachers were found to be much more supportive of teaching girls with disabilities, with 83 percent of teachers declaring that they had the skills to support inclusive teaching and 82 percent demonstrating knowledge of class seating arrangements that support inclusive teaching. Interviews with teachers show that applying these methods has led to disabled girls becoming more confident in school, and girls themselves feeling that the environment is more inclusive, and that they are less isolated.

School management and governance interventions: How have interventions brought about change? For whom? With what limitations?

Projects' evidence show that interventions relating to school management and governance[86] have been mostly inconclusive in terms of their impact on girls' attendance and learning. In terms of addressing school-level barriers, only one project presents evidence of an improvement in school management (ICL (Kenya)).

The early, positive impacts of Viva's (Uganda) model can be explained by the project's **close work and engagement with a range of stakeholders in education in Uganda**.

[86] We list the different ways in which projects have approached issues related to school management and governance in Annex F.

First, the project has aligned its interventions with the national curriculum, developed by the National Curriculum Development Centre (NCDC), which makes its model of particular interest to NCDC and to the Ministry of Education (MoEST). Secondly, as the project works with host organisations to establish its Creative Learning Centres[87], it has leveraged the linkages between host organisations and other education stakeholders at the sub-county, district and national government levels. Through its linkages with District Education Officers (DEO), Viva (Uganda) has noticed that schools are more open and cooperative to changes brought by the project when those changes are being endorsed at the district level ("*changes coming from above*"). Finally, through its strategic partnerships with teacher training institutions, the project operates with awareness of the conditions in which teachers are being trained to teach, and attempts to bring change within existing institutions rather than creating a new training system. By demonstrating that its model is effective in improving girls' learning, Viva (Uganda) is gradually changing teachers, head teachers and education experts' mind sets about the need for change.

Another example of a successful intervention aimed at addressing poor school management is ICL (Kenya). Through the training of school management board members, the project aims to improve resource mobilisation and infrastructure in schools. A key driver in achieving better school management has been **the use of Education Officers as trainers**, who can ensure a continuous process of consultation after the trainings, while being empowered to mentor school management board members on resource mobilisation. Such school-based management interventions promoting the decentralisation of authority to the local level and handing decision-making over to school leadership appear promising in the evidence presented by ICL (Kenya).

Finally, while most school management and governance interventions have been inconclusive to date, it is important to note that **inconclusive evidence does not imply that the interventions have not been effective or successful**. As a more diffuse type of intervention, it is likely that the effects of school management and governance activities have been more difficult to evidence by projects, whose focus is primarily on conducting a household survey and following a cohort of girls.

Have changes in barriers had an effect on education outcomes (attendance, learning)?

Identified as a key constraint to girls achieving education outcomes, school-related factors have been at the centre of the design of most IW project designs, with **18 projects engaging in school infrastructure improvement, teacher training and/ or school management interventions**. While a number of projects observed an increase in attendance as a result of those interventions, **11 out of 18 projects could not demonstrate any impact on learning outcomes**, with all of the evidence of positive impact on girls' learning being reported by seven projects only (Table 6 in Annex F).

While significant improvements in school infrastructure and teaching quality can be observed at midline across the IW, a majority of projects have failed to improve girls' learning. Evidence of good practice emerges from those seven projects which managed to demonstrate an impact on learning since baseline:

- Teaching teachers 'how to teach' generally improves teachers' pedagogy and delivery style, but does not always translate into learning improvements for girls. We found evidence that on-the-job trainings for teachers, through feedback, mentoring and performance monitoring, is associated with better learning for girls.
- The supply of school materials has a greater impact on learning when coupled with teacher training in the use of new materials.
- Projects such as Viva (Uganda) have effectively built upon its work and engagement with a range of education stakeholders, as part of its project design and throughout implementation, to improve school governance. By contrast, projects which have been unsuccessful in addressing issues such as teacher absenteeism and poor school management had a limited understanding of the education system in the countries in which they operate.

[87] This project is set within the context of a local network of schools, churches and community-based organisations that has recognised that more can be achieved when they work together, share resources, help children in crisis, and advocate together for change in government policy. The 20 partners work together to lobby government, present new models to the education authorities, share a resource library, and create a competitive league that gives opportunities for children to develop talents in sports and creative arts.

This indicates that the ways in which teacher training models, school infrastructure improvements or school management and governance interventions are designed and implemented have an impact on whether projects achieve better learning for girls.

Projects which have been successful at developing and implementing one of these interventions also appear to have successfully implemented other school-related interventions. Intervention packages such as PEAS' (Uganda), Viva's (Uganda), ICL's (Kenya), TfAC's (Malawi) and Varkey's (Ghana) are among the most effective models in terms of addressing school-related barriers and having an impact on learning. Those intervention models have in common that they have sought to **address multiple constraints to learning** – including the low level of training among teachers, the lack of materials and the lack of structured content.

Girls' aspirations and decision-making

Projects which have demonstrated a positive impact on either attendance or learning as a result of establishing tutoring clubs and/ or mentoring activities have not necessarily shown to improve girls' confidence. Addressing girls' lack of confidence or low aspirations as an intermediate step towards improving educational outcomes may not be as straightforward as some projects expected it to be at design stage.

There is however promising evidence from a few projects that tutoring clubs including mentoring from female teachers or role models from the community have raised girls' aspirations, and improved their learning. We found evidence that older girls or mothers in the community are best placed to understand the problems girls face and how to address them.

Enhancing girls' aspirations or addressing early marriage can be a long and complex process of attitude and practice change. Interestingly, we found that increased self-confidence may lead to girls recognising the need for better quality education, and therefore enhance their participation, voice and demands to their parents, teachers, peers and communities.

A large share of IW projects (15 out of 19) assumed in their theories of change that **girls' low aspirations** and lack of decision-making ability affect girls' education. This includes **early marriage** and the inability to make decisions relating to pregnancy.

What has changed since baseline?

At midline, 15 projects reported on barriers related to girls' aspirations (Table 7 in Annex F). The three most frequently mentioned sub-barriers are early marriage (11 projects), inability to make decisions (11 projects) and girls' lack of self-confidence (10 projects).

In terms of achieving positive change in these areas, projects' midline research shows that girls' self-confidence has been enhanced across five projects. Only two projects provide evidence of reducing occurrences of early marriage. No projects report that the situation has worsened for any of these sub-barriers. Notably, TfAC (Malawi) provides evidence of positive change for all sub-barriers in relation to girls' aspirations and decision-making.

What have projects done since baseline?

IW projects have addressed girls' low aspirations and lack of decision-making ability through two categories of interventions: first, **extra-curricular activity and non-formal education** and second, **empowerment and self-esteem interventions**. Extra-curricular activities, life skills clubs – whether open to girls only, or also to boys – are commonly established as a way to help students develop non-schooling skills, greater aspirations and commitment to study. They can also build self-confidence and communication skills, which can enable girls to participate more fully in class.

As shown in Table 27 in Annex D, along with economic interventions, non-formal education is the area that receives the **biggest share of IW projects' budget, that is, 25 percent on average**[88]. Three projects allocate more than two thirds of their budget to these activities: Viva (Uganda), BRAC (Tanzania) and VSO (Nepal). We do not have budget allocation information for empowerment and self-esteem interventions, which may be accounted for by projects under other interventions (such as school infrastructure for 'safe spaces', or community-based interventions for 'activities that promote girls' voice and participation').

How have interventions brought about change? For whom? With what limitations?

At midline, across the IW, the evidence is mixed as to whether extra-curricular activities, non-formal education and empowerment/ self-esteem interventions have effectively addressed barriers to girls' aspirations and decision-making. Most interventions are **inconclusive or shown to be unsuccessful in improving girls' attendance or learning** (Table 9 in Annex F).

It is important to note that **inconclusive evidence does not imply that the interventions have not been effective or successful**. It is likely that the effects of interventions on aspects such as girls' self-confidence or girls' aspirations and decision-making have been difficult to evidence for IW projects, or that measureable behavioural and attitudinal changes may take time.

We therefore present the evidence from the few projects (PEAS (Uganda), Link (Ethiopia), TfAC (Malawi), VSO (Nepal) and Red (South Sudan)), which have demonstrated a positive impact on either attendance or learning as a result of establishing tutoring clubs and/ or mentoring activities. Interestingly, although these projects had a focus on improving empowerment and self-esteem as part of their tutoring and mentoring activities, only Link (Ethiopia), TfAC (Malawi) and Red (South Sudan) have demonstrated a positive change in girls' confidence or aspirations. This suggests that addressing girls' lack of confidence or low aspirations as an intermediate step towards improving educational outcomes may not be as straightforward as some projects expected it to be at design stage.

There is promising evidence from a few projects that tutoring clubs including mentoring from female teachers or role models from the community have raised girls' aspirations and self-confidence, and improved their learning

Evidence from projects' midline research suggests that learning has improved for PEAS' (Uganda) girls as a result of attending girls' clubs. These clubs are set up by the project with the aim of "*improving girls' confidence, safety and aspirations through providing a space for peer-to-peer support and mentoring from senior women teachers*" (PEAS (Uganda) Midline Evaluation Report). Despite clear evidence of improved learning for PEAS' (Uganda) girls, limited evidence is presented by the project in relation to how the girls' clubs have improved girls' confidence, safety and aspirations.

In contrast, Link (Ethiopia) and TfAC (Malawi) both present evidence of girls' increased self-confidence, and in the case of TfAC (Malawi), evidence that **girls' increased self-confidence has a positive impact on their attendance and learning**: "*self-efficacy, self-esteem and school belonging are statistically significant predictors of learning outcomes in literacy, numeracy, and attendance*" (TfAC (Malawi) Midline Evaluation Report). TfAC (Malawi) girls also demonstrate a better ability to interact confidently with boys in school at midline compared to baseline.

Link (Ethiopia) and TfAC (Malawi) both worked with role models, either female teachers or parents. Girls from Link (Ethiopia) report increased confidence that education can help them in the future, after having met with female parents. Similarly, TfAC (Malawi) has worked with Agents of Change (female teachers/ facilitators) who organise weekly afternoon girl clubs, for both in-school and out-of-school girls. Girls engage in interactive group activities to build self-confidence, role-playing games to address real life situations, and exercises to build literacy and numeracy skills. While TfAC (Malawi) presents conclusive, quantitative evidence that self-efficacy leads to a positive attitude towards school and improved attendance and learning, no qualitative evidence of how this change happens for girls is given in their midline evaluation report.

[88] PwC (2015), 'Value for money (VfM) metrics on the Girls' Education Challenge – Report on VfM expenditure metrics for the GEC Year 1 and 2: January 2013 – March 2015' and PwC (2016), 'Value for money (VfM) metrics on the Girls' Education Challenge – Report on VfM expenditure metrics for the GEC Year 3: April 2015 – March 2016'. All projects with the exception of PEAS (Uganda), Raising Voices (Uganda), Red (South Sudan), VSO Mozambique, and Mercy Corps (Nepal) provided costing data for Years 1 and 2. To fill in the gaps, for these five projects, we use budget data for Year 3. Amounts of budget spent have been aggregated from different activities and categorised across outputs.

VSO's (Nepal) model, although different from the Link (Ethiopia) and TfAC (Malawi) interventions, is also of interest. With 87 percent of its total budget[89] allocated to the Big Sister mentoring scheme, VSO (Nepal) is the only IW project whose core intervention is centred on mentoring.

'Little Sisters' are supported academically and emotionally by the 'Big Sisters'. Regular visits and support from the Big Sisters aim to build a close relationship, which eventually enables the Little Sisters to be trusting enough to share their problems with the Big Sisters. The project's midline research shows that the guidance and support from the Big Sisters (help with homework, discussions with parents, mental support) has contributed to **improving attendance** of the Little Sisters – while forging relationships between girls, their parents and other members of the community. Through peer support (Big Sisters monitoring the attendance of Little Sisters) and individual guidance (Big Sisters' counselling around how to attend school in spite of household chores, parents' lack of income and other household or community-level barriers), VSO's (Nepal) model has effectively leveraged the potential of older girls in the community, who are **best placed to understand the problems target girls face and how to address them**.

A key limitation to this model remains the **high turnover** of the Big Sisters, who, after working with VSO (Nepal) for a few months, leave in order to pursue their studies, find better job opportunities or get married. This is a key constraint for the project, especially as it takes time for the new Big Sisters to build a relationship of trust and confidence with their Little Sister.

Finally, an interesting point raised by Red (South Sudan) is that **role models (and mentoring activities) can also be less formal**, and yet provide as much of a drive for change to parents as well as to girls. The project describes how 'School Mothers' have been instrumental in ensuring girls' attendance, by their ability to counsel and support girls and their parents. There are strong examples of positive change achieved in the lives of marginalised girls as a result of the actions of individual mentors.

Early marriage remains a key constraint to education for girls after puberty, despite occurrences of cancelled marriages involving IW target girls

Only two projects report an improvement in relation to early marriage at midline: TfAC (Malawi) and Red (South Sudan).

Red (South Sudan) discusses how 'School Mothers' hold regular meetings with target girls in order to "*reduce participation in some of the habits/ practices that lead them to early pregnancies and marriages*". Mothers also advocate with girls' parents for girls to stay in school, and several examples are reported by the project during which a girl was about to be married off and a 'School Mother' intervened with the parents to cancel the marriage. VSO (Nepal) also reports similar **occurrences of cancelled marriages involving IW target girls**.

TfAC (Malawi) also provided individual support and counselling to girls at risk of being married early, being pregnant or girls who had a baby/ miscarriage. Additionally, the project worked around early marriage and early pregnancy from other angles. For instance, Agents of Change have **discussed sexual and reproductive health rights with girls**, leading to fewer girls engaging in sexual activities in the treatment group compared to the control group at midline.

The legal environment is also a key concern for the project, as a bill was recently passed in Malawi (the Marriage, Divorce and Family Relations Bill), raising the legal marriage age to 18. TfAC (Malawi) reports that considerable discussion took place in the media and among girls participating in the project as to the practical implications of this new law. Importantly, the bill specifically states that that the Malawi Constitution can override the bill, and that the marriage age of 15 remains legal at the constitutional level. TfAC (Malawi) notes that this event has positively affected the project to date, as it **encourages open conversations about the legal age of marriage**.

The project launched a Model School Competition to support an initiative from the Ministry of Education, Science and Technology (MoEST), which decided to promote its readmission policy in all schools in Malawi. The policy specifically promotes the re-enrolment of girls who are pregnant, breastfeeding or who have dropped out of school

[89] PwC (2015), 'Value for money (VfM) metrics on the Girls' Education Challenge – Report on VfM expenditure metrics for the GEC Year 1 and 2: January 2013 – March 2015' and PwC (2016), 'Value for money (VfM) metrics on the Girls' Education Challenge – Report on VfM expenditure metrics for the GEC Year 3: April 2015 – March 2016'. All projects with the exception of PEAS (Uganda), Raising Voices (Uganda), Red (South Sudan), VSO Mozambique, and Mercy Corps (Nepal) provided costing data for Years 1 and 2. To fill in the gaps, for these five projects, we use budget data for Year 3. Amounts of budget spent have been aggregated from different activities and categorised across outputs.

due to marriage or having children. TfAC's (Malawi) Model School Competition rewards schools which create a supportive environment and allow young mothers to breastfeed at school.

Have changes in barriers had an effect on education outcomes (attendance, learning)?

Except for a few projects which have presented conclusive, positive evidence of impact on attendance and/ or learning at midline, **most extra-curricular activities, non-formal education and self-esteem/ empowerment interventions have been inconclusive or ineffective to date** (Table 9 in Annex F).

There is encouraging evidence from a few projects that support from mentors, community members and other (older) girls have improved girls' aspirations and self-confidence, which low levels were negatively impacting girls' learning and attendance outcomes. However, despite specific examples of positive change achieved in the lives of marginalised girls as a result of the actions of individual mentors, early marriage remains a key constraint to education for girls after puberty. Without disaggregated data on re-enrolled young mothers or married girls, it is difficult to conclude on the general effects of interventions on education outcomes.

Finally, the timeframe required to achieve lasting change in areas such as early marriage or girls' ability to make their own decisions was reported as a challenge by most projects which have attempted to address those barriers.

Negative attitudes towards girls' education

After two years of implementation, limited evidence could be found of improving attitudes towards girls' education. This can be explained by the fact that attitudes are already relatively positive in target communities, as shown using projects' data.

The effectiveness of community dialogues (meetings, gatherings) or media campaigns appears to be limited. However, community-based interventions involving parents' visits to households and outreach activities led by community members have shown promising effects on changing attitudes towards girls' education.

While there is evidence of improved attendance from a few projects, no project found that community-based interventions have a direct effect on improving learning.

Sixteen out of 19 IW projects assumed in their theories of change that **negative parental and community attitudes** towards girls' education led to girls being less likely to enrol and remain in school than boys.

What has changed since baseline?

At midline, 16 projects reported on barriers related to attitudes towards girls' education (Table 10 in Annex F). The three most frequently mentioned sub-barriers are negative attitudes towards girls' education (12 projects), lack of family support for education (10 projects) and parents'/ communities' low awareness of the value of education (seven projects).

In terms of achieving positive change in these areas, projects' midline research shows that family support for education has increased across five projects. Only four projects (out of 12 addressing this barrier) provide evidence of improving attitudes towards girls' education. TfAC (Malawi) reports that the situation has worsened in terms of negative attitudes towards girls' education and families valuing boys over girls.

What have projects done since baseline?

A total of 15 projects have undertaken a variety of activities to raise awareness of the value of education in communities, mobilised parents to (re-) enrol their girls in school, and engaged communities in improving school governance and support structures for girls see (Table 11 in Annex F).

A key focus of IW projects has been on **community meetings/ gatherings** (seven projects). For example, Red (South Sudan) implemented four community-based interventions: community meetings/ gatherings, household

visits and support, activities with men and boys and activities with faith groups and traditional leaders. On average, IW projects are spending 15 percent of their budget on community-based activities[90].

How have interventions brought about change? For whom? With what limitations?

Projects' discussion of attitudinal change in their Midline Evaluation Reports often covers a number of sub-barriers at once, particularly in the qualitative evidence presented. For instance, projects discuss negative attitudes towards education or families valuing boys' education over girls as part of the lack of family support for education. In this section, we choose to focus on **parents' attitudes and support towards education** and the broader **community's views on whether girls should be in school and learn**. Importantly, as a result of social desirability bias, further negative attitudes towards girls' education may exist, compared to what is actually being reported by projects. It is also fair to note that most projects report difficulties in measuring intermediary outcomes such as attitudes and behaviours[91].

The effectiveness of community dialogues (meetings, gatherings) or media campaigns appears to be limited

Community-based activities such as community gatherings/ meetings do not seem to have had an impact on parents' attitudes and beliefs around girls' education. For example, despite community dialogue taking place in Raising Voices (Uganda) project areas, focus group discussion participants at midline still express opinions such as "*boys have more priority in our home than girls*" and "*a girl should have more responsibilities and duties than boys, even if she's [enrolled] at school*". Similarly, projects' evidence shows no improvement (Table 10 in Annex F) in community attitudes from baseline to midline as a result of community gatherings/ meetings organised by PEAS (Uganda), BRAC (Tanzania) and TfAC (Malawi).

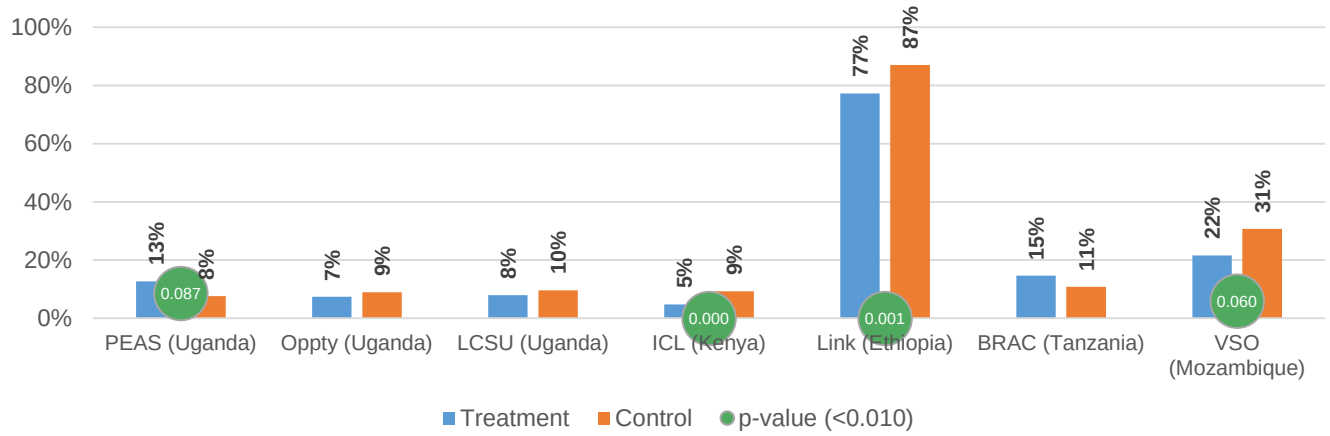
Across seven IW projects (for which we have been able to reanalyse household survey data[92]), we found a significant difference in attitudes towards girls' education between the treatment and control groups at midline in four projects (Figure 23). While in five projects, caregivers do not express a strong belief that girls learn less than boys in school (less than 15% in treatment and control groups), in Link (Ethiopia) and VSO (Mozambique), caregivers are respectively 77% and 22% to share this belief in treatment groups. Importantly, this proportion is lower than in control groups. We can also note that in PEAS' (Uganda) treatment areas, caregivers' attitudes are more negative than in control groups. Overall, this suggests that **attitudes are already relatively positive in most of these communities**.

[90] PwC (2015), 'Value for money (VfM) metrics on the Girls' Education Challenge – Report on VfM expenditure metrics for the GEC Year 1 and 2: January 2013 – March 2015' and PwC (2016), 'Value for money (VfM) metrics on the Girls' Education Challenge – Report on VfM expenditure metrics for the GEC Year 3: April 2015 – March 2016'. All projects with the exception of PEAS (Uganda), Raising Voices (Uganda), Red (South Sudan), VSO Mozambique, and Mercy Corps (Nepal) provided costing data for Years 1 and 2. To fill in the gaps, for these five projects, we use budget data for Year 3. Amounts of budget spent have been aggregated from different activities and categorised across outputs.

[91] IW projects used a wide range of qualitative tools in order to measure attitudinal changes. General information can be retrieved from Key Informant Interviews (KIIs) that include local education departments, political leaders, school directors and head teachers. This method is employed by most IW projects and is completed with teacher observations (Varkey (Ghana), ChildFund (Afghanistan)) and classroom observations (VSO (Mozambique), Camfed (Zambia)). Household surveys are the second method to collect qualitative data. The information gathered is rich, deals with more personal characteristics, and some beliefs or attitudes related to girls' education can be measured. Although open-ended questions can be included, the structured nature of questionnaires generally limits the collection of data to yes/no responses and to levels of agreement to suggested propositions. Finally, In-Depth Interviews (IDIs) and Focus Group Discussions (FGDs) are rich tools to collect data on perceptions, opinions, beliefs and attitudes. Carried out face-to-face, those create a rapport between the interviewer and the respondents. A wide range of actors including school staff, PTAs members, parents, boys and girls took part in FGDs conducted by IW projects, which contributed to the richness of data collected across the IW. Finally, some projects used participatory exercises in order to collect additional data that could not be investigated through FGDs. BRAC (Tanzania) tested communication, negotiation and confidence skills by giving the girls short exercises and by scoring them on various skills. By contrast, TfAC (Malawi) used Safety Mapping Exercises where girls had to identify "safe" and "unsafe" places and discuss what made them safe/ unsafe.

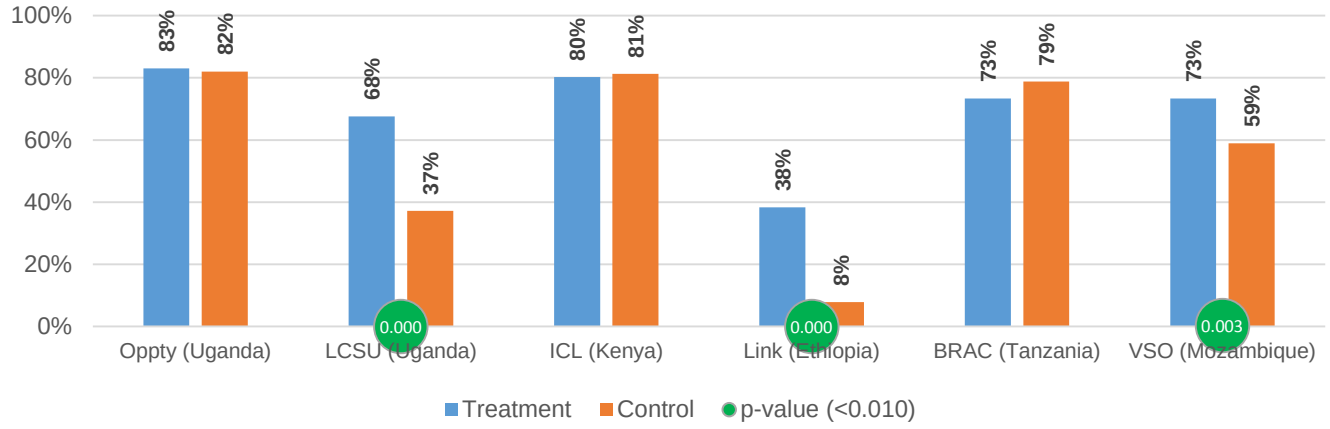
[92] Refer to Table 2 in Annex D.

Figure 23: Percentage of primary care givers stating that girls learn less than boys in school (Reanalysis from Project Datasets)



Project datasets reanalysis also shows that overall, most caregivers believe that it is common to send girls to school, especially for LCSU's (Uganda), Link's (Ethiopia) and VSO's (Mozambique) caregivers, for which the difference in perceptions between treatment and control groups is statistically significant (Figure 24).

Figure 24: Percentage of primary care givers believing than it became more common to send girls to school since baseline (Reanalysis from Project Datasets)



Change in attitudes towards disabled girls' education can be observed at the community level

Often led by parents of disabled girls themselves, positive change can be observed in LCDK's (Kenya) and LCSU's (Uganda) treatment communities with regards to attitudes towards disabled girls' education. LCDK (Kenya) focuses on the establishment of **parents' support groups including male mentors**. Parents' support groups are described by the project as "*providing a place where they can share experiences and begin to advocate for the rights of disabled girls in their communities*". LCDK (Kenya) also describes how **male mentors have had one-to-one discussions with other men in the community**. Male mentors indicate that as a result, some community members now prioritise the payment of school fees, take girls to school on bikes and help to identify out-of-school girls in the community.

Community-based interventions involving parents' visits to households and outreach activities led by community members have shown promising effects on changing attitudes towards girls' education

We chose to focus on two projects which have implemented **visits and support to households** as part of their community-based interventions: Viva (Uganda) and Red (South Sudan). Both projects have been effective in improving attitudes towards girls' education, as well as increasing attendance.

Red (South Sudan) mobilises 'school mothers', who visit schools three times a week to check on girls. The project notes that in the absence of female teachers, girls feel supported in the community with the presence of the school mothers. The school mothers have also been providing counselling services for the girls to attend school regularly.

Viva (Uganda) works with **community mentors** who engage directly with parents in the community to help them develop parenting skills, household economic sustainability strategies, and to change their attitude towards girls' education. The project notes that mentors have unravelled "*the complexities of family issues, emotional trauma and household poverty*" during the first two years of implementation, those complexities being more difficult to address than originally expected. As a result, further training and resources have been provided to mentors, and the project is considering using professional counsellors during the final year of implementation.

Although they are achieving positive change in attitudes towards girls' education, **the sustainability of these interventions can be questioned**, as incentives for school mothers, community mentors and other community members to carry out outreach activities may lessen once the project ends – especially for school mothers who dedicate a large amount of their time to visits schools and parents.

Have changes in barriers had an effect on education outcomes (attendance, learning)?

Identified as one of the barriers to girls' attendance and learning, addressing negative attitudes towards girls' education (in the community and among parents) has been at the core of 15 IW projects' interventions. At midline, **only six projects present evidence of a positive improvement in attendance** (Table 12 in Annex F). No improvement in girls' learning is evidenced by projects at midline as a result of community-based interventions.

In terms of improving attendance, community-based interventions involving parents' visits to households and outreach activities led by community members have shown promising effects on changing attitudes towards girls' education.

While attitudes are still reported across projects as one of the barriers affecting girls' education at midline, it is important to note that in eight project areas (out of nine projects for which we have data), negative attitudes are expressed by less than 20 percent of primary care givers, suggesting that attitudes are already relatively positive in these communities.

Violence and safety

Violence, which includes a wide range of aspects such as physical and emotional violence, food restriction, sexual abuses, harassment from peers, corporal punishment, early/ forced marriage and female genital mutilation, is still an important barrier to girls' education at midline across IW projects.

In IW target areas, some forms of violence are culturally accepted and not punished. These are primarily addressed by projects through community sensitisation interventions, with mixed effects. The set-up of violence-free classes proved successful in addressing issues of corporal punishment at school and in improving educational outcomes.

Thirteen IW projects assumed in their theories of change that issues around safety and violence act as barriers to girls' education. This included general insecurity, conflict, (domestic) violence, sexual harassment, assault or violence, and corporal punishment.

What has changed since baseline?

At midline, no positive changes are observed, except for a decrease in incidences of insecurity and harassment in two projects' areas (Table 13 in Annex F). The situation is getting even worse concerning fear of violence (two projects), harassment and insecurity (three projects) and reports of violence (one project).

What have projects done since baseline?

Across 11 projects tackling violence, violence-related interventions are implemented at two levels:

- At **community level**, projects aim to enhance awareness around violence (four projects), to sensitise parents to the issues related to early marriage and FGM (two projects), as well as to the issue of child abuse from adults (six projects).

- At **school level**, violence-related interventions relate to the development of child protection policies in schools (three projects), improvement of referral systems (three projects), interventions against corporal punishment (one project), and interventions against peer violence (two projects).

Violence-related interventions at the community level: How have interventions brought about change? For whom? With what limitations?

Community awareness activities had a limited impact on violence occurring at home

In some areas, parents report using violence (physical, emotional and/ or denying food) as a form of discipline in their households. In order to prevent violence against children (VAC), Raising Voices (Uganda) supported the work of VAC Prevention Centres, which included **community mobilisation events** intending to promote positive forms of discipline among parents in intervention areas. Similarly, BRAC (Tanzania) chose to implement community-based awareness activities. At midline, both projects report no change in parents' reported use of violence. These barriers also appear difficult to overcome given the limited capacity of government structures responsible for these matters. For example, BRAC (Tanzania) reports that cases of child defilement by a family member have been extremely difficult to address from a legal perspective.

Violence against children is difficult to address when under-reported

At the community level, child abuse is another recurrent form of violence observed across IW projects. Projects which have tried to increase the reporting of cases of child abuse, especially sexual abuse, have found it challenging to deal with the culture of silence that prevails in communities. For instance, when BRAC's (Tanzania) staff heard about such cases, the victims refused to talk when they were approached by members of the projects, as they were afraid of losing the support of their families.

Interestingly, in addition to child protection training provided to teachers, parents and influential members of the community, TfAC (Malawi) involved the rest of the community through **participatory violence prevention sessions**. During one of these sessions, girls were asked to collaboratively draw a map where they marked safe places with a green dot and discuss why they were safe, and unsafe places with a red dot and discuss why they were unsafe.

TfAC (Malawi) also encouraged community members to join community listening clubs to listen to radio broadcasts focusing on violence against children, in order to raise awareness around children's rights and reporting mechanisms in cases of suspected abuse. Nevertheless, **the effects of these preventive actions on child abuse within the community are difficult to measure, and mostly inconclusive at midline**.

Community sensitisation activities have improved negative attitudes and reduced the number of reported cases of violence towards disabled girls

Children with disabilities are particularly exposed to these forms of violence. LCSU (Uganda) and LCDK (Kenya) reported that the parents of disabled girls are more afraid of violence compared to other parents, and prefer to keep their girls home.

As a result of community sensitisation around the needs and rights of girls with disabilities, and the right of education for all children, LCDK (Kenya) reported a reduction in stigma, discrimination and violence against children with disabilities. The project has increased the general awareness around child protection issues in the communities. As a result, communities have created a *community child protection system* which facilitates the protection of all children, regardless of their social status. The project has also trained and deployed **Volunteer Children Officers in the community**, who are tasked with identifying and reporting cases of child abuse. This has been strengthened by the training of Area Advisory Councils in four sub-counties. As a result, LCDK (Kenya) observed an **increase in reporting of child abuse cases**, which allows the project to provide medical support to abused children.

LCSU (Uganda), also targeting disabled children, worked with several partners such as the Police Child and Family Protection Unit, the Probation and Social Welfare Office at Kampala Capital City Authority, the Ministry of Gender and Social Development (Child Protection Working Group) and other child-related agencies in order to increase the reporting of cases of child abuse. However, these partnerships have not had the intended effect. In most cases, the project faced a **limited commitment of the dedicated government structures**.

Interventions tackling early marriage and female genital mutilation (FGM) at the community level are complex to implement and require an in-depth understanding of the local context and local practices

Another form of violence which directly affects girls' ability to enrol, attend and learn in school is early/ forced marriage. Early marriage is a cause of drop-out, either directly because girls take the role of being a full-time caregiver/ head of household, or indirectly as a result of early pregnancy.

To address this, interventions are limited to community engagement activities since in most IW countries, **there is no law forbidding early marriage and/ or some practices are culturally rooted**. For instance, in South Sudan, there is a tradition of marrying girls to 'dead men', in order to 'console the family'. This leads to situations in which a girl is 'offered' to a family who lost a man, in order to give birth to children 'of the dead man'. In reality, the girl marries the brother or son of the dead man and all children born are named after the dead man. Traditionally, if a girl comes to 'console a family', she cannot be sent back to her home for fear of the spirit of dead man taking revenge. Several cases of this kind of marriage are mentioned by Red (South Sudan).

Violence-related interventions in schools: How have interventions brought about change? For whom? With what limitations?

Violence and safety issues in the schools take the form of physical, verbal and sexual harassment. This is still a major barrier to girls' education, which involves a range of different perpetrators, such as school boys, teachers and male adults within the community.

Peer harassment has lessened as a result of improvements in school facilities

PEAS (Uganda) observed that harassment at school affects girls' feeling of safety, which discourages them from attending. Harassment can also negatively impact girls' self-confidence, reducing their belief in their own worth, which can have a negative impact on learning. At midline, PEAS' (Uganda) midline research shows that the 'gendered' design and implementation of PEAS schools positively affected boys' behaviour towards girls, compared to control schools. More generally, PEAS schools **increased girls' safety through school infrastructure improvements** such as the installation of separate sanitation facilities for girls, and lighting in areas commonly used by girls (e.g. dormitories, sanitary blocks). These facility improvements have had a positive impact on girls' attendance because they provide visible, tangible changes to the school environment, and respond to what parents expect from schools to ensure their girls' safety. Such improvements also had a strong 'demonstration effect' in showing that the school values the safety of girls.

Harassment from teachers has proven difficult to address

Raising Voices (Uganda), HPA (Rwanda), VSO (Mozambique) and VSO (Nepal) all report occurrences of violence being perpetrated directly by teachers. As girls do not report the situation until they became pregnant or ill, it is difficult to evaluate the frequency of harassment and sexual assaults across the school.

VSO (Mozambique) opted for the set-up of **reporting boxes**. This resulted in the report of cases of violence which might have gone unreported before. Girls interviewed by VSO (Mozambique) also indicated that they have reported incidents of harassment and violence against girls to **gender focal point persons**. However, the effectiveness of this reporting system is questionable, as most school directors and gender focal point persons interviewed at midline declared that there were no cases of sexual harassment or violence against girls in their school. The project also indicated that there were cases the school had refused to be involved in, arguing that those were to be dealt with within the community, not the school.

Corporal punishment has diminished in treatment schools

Another form of violence encountered at school is corporal punishment. Recent research[93] reflects the high prevalence of corporal punishment in Ugandan schools in particular. Tanzanian law allows corporal punishment in schools and parents also believe that corporal punishment helps improve the performance of students. Likewise, in Ghana, although efforts are being made to eliminate caning practice, teachers still use caning as a way to impose discipline in the classroom.

[93] Devries, K. M., et al (2015), "The Good School Toolkit for reducing physical violence from school staff to primary school students: a cluster-randomised controlled trial in Uganda", *Lancet Global Health*, 385, e378–386.

Raising Voices (Uganda) and Varkey (Ghana) both implemented activities aimed at reducing corporal punishment. Both projects advocate the creation of violence-free schools to teachers and school administrators, and both observed **a reduction in reports of physical violence perpetrated by teachers/ school staff**.

While Varkey (Ghana) does not present quantitative evidence to confirm a clear reduction of this practice among target girls, positive reports from students are encouraging.

Have changes in barriers had an effect on education outcomes (attendance, learning)?

Identified as a key barrier to girls' attendance, addressing violence perpetrated in and outside the school has been at the core of 11 IW projects. At midline, **only three projects present evidence of a positive improvement in either attendance or learning** (Table 15 in Annex F).

In terms of improving educational outcomes, corporal punishment prevention has been most effective. For PEAS (Uganda) and Viva (Uganda), school-based interventions resulted in an improvement in attendance, while Varkey (Ghana) reports an improvement in learning as teachers provide explanations when students do not understand rather than using corporal punishment.

While violence, in its various forms, remains a key barrier affecting girls' education at midline, it is important to note that its root causes are structural or culturally rooted in a range of traditional practices, which **IW projects are neither equipped or expected to comprehensively address as part of the GEC**.

3.4.2 What other non-GEC activities and external events have happened and with what effect on barriers and intervention effectiveness?

Many external events independent from GEC activities occurred during the last two years of implementation that directly or indirectly affected project delivery. Each project intervenes in a given political context, meaning that events such as elections triggered short-term changes in government activities and/ or more permanent shifts such as political reforms. IW projects had to quickly adapt in order to avoid important delays in their implementation.

Similarly, the presence of other projects operating in GEC areas has had an impact on IW projects' outcomes, either by reducing their relative impact in treatment areas when non-GEC projects improved the situation in control areas, or by helping GEC projects attain their objectives in treatment areas. Violence and environmental disasters were also significant obstacles to implementation, leading to temporary closures of schools or rendering some areas inaccessible.

The presence of other non-GEC projects in GEC areas contributed to improving girls' learning

Other projects operating in GEC areas also influence GEC projects' work. When working in control areas, these external interventions can positively or negatively affect IW projects results. For instance, other GEC projects worked with LCSU (Uganda) control groups such as in the Makindye District, leading to improvements in control groups' outcomes. Similarly, organisations operating in projects' control areas (such as the World Food Programme and the National "Keep Girls at School" programme in HPA's (Rwanda) project areas; Tear Fund, BRAC and Africa Education Trust in Red's (South Sudan) project areas) contributed to improve education outcomes in control groups.

When working in treatment areas, non-GEC projects may have complemented IW projects' interventions. For example, in Uganda, LCSU (Uganda) mentions a number of other organisations working within treatment schools – for example WaterAid working on Water and Sanitation for Health (WASH) and Raising Voices (Uganda) working on child protection. In some cases, projects are discussing whether to link their activities to more specialist organisations or government programmes to improve their delivery. In Kenya, the Tusome Early Grade Reading activity[94] (supported by USAID and DFID) trains teachers in early grade reading and is progressively being implemented in every primary school in the country. ICL (Kenya) reports that this has resulted in an improvement in teachers' capacity but the programme has stretched the availability of Ministry of Education staff and educational officers, meaning that they are less able to support GEC activities.

In South Sudan, several programmes aimed at sending girls back to school have been designed over the last two years. Red (South Sudan) has been able to leverage support from political leadership and other key stakeholders in Rumbek East. These have been instrumental in ensuring community mobilisation and sensitisation on girls'

[94] https://www.usaid.gov/documents/1860/tusome-early-grade-reading-activity.

education. Similarly, in Nepal, the increase in attendance observed by VSO (Nepal) can be attributed to a government-led campaign on enrolment coupled with the project's awareness campaign with parents and community members to send their children to school. Finally, other actors have also reported to be delivering media activities focused on improving community attitudes to girls' education. Girls in the Macate district of Mozambique mentioned in a focus group discussion that in addition to media activities organised by VSO (Mozambique), the district radio Sissundenga had a daily programme advising fathers to let their children go to school. Lead girls at Chimbua Primary School in Sissundenga also reported that Radio Mozambique advised girls "*not to get married early*". Such media campaigns will have reached both intervention and control areas, rendering the attribution of results to GEC activities more difficult.

Elections and institutional changes hindered project implementation in Uganda, Mozambique and Kenya

A variety of political factors affected project implementation. For instance, municipal and presidential elections affected GEC projects in Mozambique and Uganda. As the teachers were mandated by the government of Mozambique to assist the election process, the 2013 and 2014 school years were shortened in the whole country, extending the school holiday period from November to February. In Uganda, preparations for presidential and other elections affected some of the activities due to safety concerns. For instance, Raising Voices (Uganda) reported that in Kampala and Wakiso, community dialogues began later than the scheduled time because it was very difficult to get permission from the police.

In those two countries (Uganda and Mozambique), institutional restructuring delayed implementation. The project led by Raising Voices (Uganda) was introduced at a time when the Kampala Capital City Authority (KCCA) Education Department was undergoing a major strategic restructuring process. This affected the implementation of the project because all NGOs seeking to work with schools in Kampala were not granted permission until the process was completed, which took about two years. In Mozambique, the new government initiated the creation of new districts in the Manica province, which was followed by a reallocation of community facilitators' responsibilities, and by the introduction of new local school authorities with whom VSO (Mozambique) had to work.

In Kenya, ICL (Kenya) and LCDK (Kenya) have had to operate in a complex political system since a new constitution establishing education as a national function was enacted in 2010. However, local government have been entrusted for implementing the policies as directed by the Ministry of Education, they face number of challenges to exercise these responsibilities, such as lack adequate human, financial and material resources[95]. This was one of the root causes to the month-long teacher strikes in Kenya in 2014 and 2015 that affected both projects, and which resulted in the students not being able to attend school. In June 2016, Teachers' Unions and the Teacher Service Commission reached a pay agreement which should halt strikes in the coming years[96].

A number of governmental decisions directly affected IW projects' delivery

A number of decisions made by local or national governments directly affected projects' activities with marginalised girls. For instance, LCSU (Uganda) reported that when the local government banned street vending, a source of livelihood for many care givers, marginalised girls' families had to choose between unemployment and moving to other places to find business opportunities. TfAC (Malawi) also mentioned changes in the legal environment, namely the Marriage, Divorce and Family Relations Act which raised the legal age of marriage to 18 and a policy from the Ministry of Education which now promotes the re-enrolment of girls who are pregnant or breastfeeding. TfAC (Malawi) stated that the project has raised community awareness around these policies.

More directly related to girls' education, PEAS (Uganda) reported the difficulties encountered for receiving Universal Secondary Education (USE) funding from the Government of Uganda, which has declined in real value over the course of the GEC. This is part of a larger trend observed in Uganda. The overall share of spending on education in the national budget fell from 24 percent in 1997 – when USE was introduced – to 17 percent in 2015[97]. PEAS (Uganda) has absorbed over half (53 percent) of the negative impact on student fees, so that the majority of additional costs have not be transferred to students. Despite this, several schools had to increase fees above inflation in 2015 to cover their operating costs.

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[95] International Institute for Education Planning (UNESCO), 2014, *Decentralization in Education: Overcoming challenges and achieving success – the Kenyan experience*, http://unesdoc.unesco.org/images/0022/002298/229832E.pdf.
[96] http://www.nation.co.ke/news/no-teachers-strike-for-four-years--says-Knut/1056-3262512-jr12ey/index.html.
[97] A. Lenhardt, E. Page, M. Sarward, and A. Shepherd (2016). Anti-discrimination measures in education: a comparative policy analysis, *Chronic Poverty Advisory Network*, United Nations University.

In contrast, in Tanzania, newly elected President John Magufuli abolished secondary education fees in December 2015, and ordered private schools to reduce fees. This has led to a great increase in the number of new enrolments observed by BRAC (Tanzania), but has also resulted in a number of challenges as the decision came as a surprise. Without offsetting the funds previously provided by school fees, this measure will have a limiting long term impact on school capacity to provide quality education[98]. Although this ban came as a relief for parents, it leaves head teachers further stretched as they try to run their schools with fewer resources.

Violence is a significant obstacle to IW projects' work in some areas

GEC project participants are facing violence at different levels and across a variety of contexts.

At the regional level, Red (South Sudan) faces on-going violence and insecurity due to ethnic conflict and revenge for violence committed against family members. Violence in Lakes State, where Red (South Sudan) is working, has had an impact on school teaching as inter-clan fights led to the killing of teachers and head teachers. Among other incidents, in 2015, a group of armed youth attacked and killed a teacher and students at Mathiang primary school, resulting in the closure of the school and the relocation of the classes to Mathiang trading centre in order to protect them from another rival youth group. In addition, teacher training became more difficult to implement, as inter-clan fighting meant that teachers coming from different Payams[99] saw each other as 'enemies'. When someone from a Payam is killed during inter-clan fights, the Payam clan must seek revenge, which usually implies targeting someone prominent or educated such as a teacher. This meant that teachers could not attend trainings alongside teachers from the 'enemy clan', for fear of being killed.

In addition to this, the war in South Sudan caused a high influx of guns that also penetrated the schools, with many teachers as well as students coming to school with their guns for safety reasons. This affected discipline among students but also put the lives of teachers at risk. Each time a violent incident occurred in schools, the project reported that schools were forced to close down until the situation returns to normal. For example, in June 2015, the project staff had to be evacuated from the project area for some weeks because of armed conflict. It is estimated that between December 2013 and April 2015, over 133,000 people have been displaced in the Lakes State covered by the project[100], and during 2015 seven schools (two in treatment Payams and five in control Payams) were closed down and villages displaced.

With less negative consequences, in Mozambique, violent clashes between government and opposition forces caused a tightening on immigration that delayed the arrival of VSO (Mozambique) volunteers and experts. In Nepal, political unrest and blockades which began in September 2015 and affected the whole country, limited VSO's (Nepal) ability to deliver activities, especially in Parsa where schools were closed for at least four months. Except for Big Sister mentoring and Little Sister activities, other activities were paused. International volunteers were also evacuated. Mercy Corps (Nepal) notes that political unrest causing school closures and curfews may be a challenge they face in the future.

Environmental disasters delayed IW projects' work with the communities

Environmental disasters hindered projects' ability to roll out their activities. Below-average rainfalls due to El Niño, observed in Mozambique at midline, are expected to have an impact on VSO (Mozambique) target populations as poverty and uncertain livelihoods are often negatively correlated with girls' attendance and learning[101]. El Niño also caused floods in 2015 that affected VSO (Mozambique), LCDK (Kenya) and TfAC (Malawi) project areas, rendering some areas inaccessible and data collection for midline more difficult. In the case of LCDK (Kenya), the data collection period was extended to near the Christmas period, during which people were less willing to be interviewed, or had left to celebrate the holidays. In 2014, one of the target schools of VSO (Nepal) was swept away by flash floods. This caused families to migrate and students who were left behind had to attend a different school. Nevertheless, the Teacher Trainer international volunteers continued to train the teachers, and activities for the Little Sisters, including mentoring from Big Sisters, continued without access to school premises.

The 2015 earthquakes that occurred in Nepal also affected GEC activities. This affected midline data collection for VSO (Nepal) but not for Mercy Corps (Nepal), which collected midline data before the earthquake and seems to

[98] Accessed 21 October 2016.
[99] A Payam is an administrative division in South Sudan.
[100] OCHA (UN), 2015, *South Sudan: Crisis Situation Report No.82* http://reliefweb.int/sites/reliefweb.int/files/resources/South_Sudan_Situation_Report_No_82.pdf.
[101] L. Engle and M. Bleck (2009) :The Effect of Poverty on Child Development and Educational Outcomes, Annales of the New York Academy of Sciences, vol. 1136, No 1, pp.243-256.

have had limited communication with earthquake-affected areas at the time the report was written. Schools in VSO (Nepal) treatment areas, including sanitation facilities, were destroyed or damaged by the earthquake which caused the project to shift its activities towards emergency education activities for six months. The project staff, including the Big Sisters, were trained on the delivery of psychosocial support for children, including support in the establishment of temporary and semi-permanent learning centres. While these activities were being conducted, Big Sisters continued to regularly visit their Little Sisters to mentor them. The project reported that they set up 41 semi-permanent learning spaces and WASH facilities in Dhading and Lamiung and learning and teaching kits were provided to 81 schools to help replenish school materials. VSO (Nepal) reports a decrease in enrolment from 2014-2015 to 2015-2016 in both treatment and non-target schools in the Dhading and Parsa districts. In the Dhading district, this appears to be due to the destruction of 11 target schools and parents feeling that it was not safe to send their children back to re-established schools.

3.4.3 What effects have IW interventions had on boys?

Although the GEC aims to improve marginalised girls' lives through education, boys are also impacted by project interventions, as they attend the same schools, live in the same households and belong to the same communities exposed to GEC interventions.

Table 17: Learning beneficiaries across IW projects

Learning beneficiaries		Boys	Girls	Projects' comments
Eco	Uganda		15 058	
PEAS		4 588	4 924	Many of the GEC interventions in PEAS schools target general improvement to school facilities and curriculum that benefitted girls' and boys' learning outcomes.
Oppty		0	14 220	No direct beneficiaries among boys.
Viva		0	2 107	No direct beneficiaries among boys.
RV		86 400	17 280	Boys attending the 1000 Schools Project. Raising Voices (Uganda) assumes that all boys in all intervention schools benefit from the systemic changes brought by the project.
LCSU		2 183	2 024	Boys with disabilities enrolled by the project got the same exposure than girls.
LCDK	Kenya	582	2 355	Boys with disabilities enrolled by the project got the same exposure than girls.
ICL		5 757	9 170	Based on County Directors of Education enrolment records.
Link	Eth	70 591	51 801	Boys at schools that benefit from the systemic changes.
HPA	Rwa	14 310	18 781	Boys are learning from school businesses and also benefiting from the ECOSAN toilets. Boys are also participating in exchange visits, clubs, theatre competitions and Urunana radio soap opera.
Red	Sou	5 244	4 722	Boys having access to project activities.
BRAC	Tan	1 681	9 950	Boys are also taking part in peer mentoring sessions.
VSO	Moz	6 486	5 965	Boys that benefit from interventions earmarked to create gender responsive learning environments.
Camfd	Zam	8 753	6 967	Boys are directly benefitting from the interventions.
TfAC	Mal	0	9 000	No direct beneficiaries among boys.
Varkey	Gha	3 039	3 667	Boys who are receiving intervention alongside the girls in Math and English in all 70 intervention schools.
VSO	Nepal	0	7 429	No direct beneficiaries among boys.
Mercy			8 000	
ChFnd	Afgh		1 405	Boys benefit directly from the intervention but there is no information about their number.

Boys are also benefiting from projects activities, with observed improvement in educational outcomes

For a number of IW projects (Opportunity (Uganda), Raising Voices (Uganda), LCSU (Uganda), LCDK (Kenya), HPA (Rwanda), BRAC (Tanzania) and Camfed (Zambia)), boys benefited indirectly from interventions initially targeting girls such as improvements in the quality of teaching and the provision of school materials. They were

also impacted by projects' community sensitisation on various issues. For instance, disabled boys benefited from the improved attitude of non-disabled children following LCSU (Uganda) activities. Moreover, in some projects, boys also directly benefited from a 'portion' of the interventions such as participation in competitive literacy and sport leagues with other schools (Viva (Uganda)), satellite transmitted classes (Varkey (Ghana)), school transportation (LCSU (Uganda)), or even from the mobile education model (ChFnd (Afghanistan)). Boys are also learning from school businesses (growing and selling crops) and benefiting from ECOSAN toilets, which are separated for boys and girls (HPA (Rwanda)). Consequently, PEAS (Uganda), ICL (Kenya), Link (Ethiopia), Camfed (Zambia) and Varkey (Ghana) projects observe that **boys benefiting from activities also improve their learning and attendance outcomes**, along with the gender gap diminishing between baseline and midline.

By contrast, Red (South Sudan), which observed a drop out of 31 percent of boys from treatment and control communities between baseline and midline, appears to be a specific case: due to insecurity induced by the civil war, boys feel more protected at home or at the cattle camp where they have guns than at school. In addition, when a family member has been killed, some boys drop out of school in order to get trained to take revenge.

IW interventions have an impact on relationships between boys and girls, both positively and negatively

Relationships between boys and girls have also been affected by IW interventions. In some cases, **boys improved their attitudes towards girls**: they show more respect towards their female counterparts (Red (South Sudan)), are more likely to help them with their homework (BRAC (Tanzania)), and are more aware of the importance of girls' education (47.2 percent of the boys compared to five percent at baseline) (HPA (Rwanda)). They are also very supportive of opportunities to learn and attend school being offered to girls and also volunteer to assist girls with their homework or to accompany them on the way to and back from school (Link (Ethiopia)).

However, boys also feel disadvantaged compared to girls who, for instance, receive soap to wash their clothes and/ or benefit from tutoring sessions. For instance, boys attending Varkey (Ghana) in-school lessons started showing resentment because they felt left out from 'Wonder Woman' sessions and from the school snack programme. The project conducted focus group discussions with the boys to consult them on how best to address the interest of boys without causing any form of disruption to the girls and the project. As a follow-up, 'Boys Boys' sessions are being held monthly online to engage the boys. Similarly, ICL's (Kenya) findings reveal community concerns in relation to the **emphasis of girls' education at the expense of boys' education**. This issue, particularly strong in Laikipia and Meru, led the project staff to alter the project design in order to include as many boys as possible in project interventions such as clubs and mentorship sessions. However, budget constraints did not allow for payment of school fees for boys, which led to demoralisation among parents and boys, as these benefits were visible when offered to girls. This is especially true in communities where everyone, regardless of the gender of their children, struggles with poverty.

In some cases, boys appeared to be as marginalised as girls. Mercy Corps (Nepal) reported that boys (like girls) going to government schools are marginalised compared to other children attending private schools which are seen to provide better quality English-based education. LCSU (Uganda) observed that disabled boys face equal challenges to girls in terms of accessing education, which justifies an equal treatment for marginalised boys and girls. In one case, relationships between boys and girls appear to have worsened. Girls' harassment issues, described by VSO (Mozambique) at baseline, have not improved at midline. Gender responsive initiatives such as sitting girls next to boys in class have led to unintended consequences such as boys taking advantage of the sitting arrangements to touch the girls inappropriately. Furthermore, there have been incidents with boys being punished for their behaviour towards girls at school, and then waiting for girls on the way home to harass them for having reported them to the head teachers. The result is that most girls are now afraid to report the abuse, which highlights the limitations and potential **harm resulting from some poorly-planned gender interventions**.

3.4.4 What were the unintended consequences of IW interventions? To what extent have projects adapted their activities since baseline to improve their effectiveness?

Most of the projects adapted their activities since baseline because of new barriers identified, or because planned interventions were difficult to implement or inefficient (Table 18).

Table 18: Changes to project interventions, target groups and outcome targets since baseline

Changes to interventions, target groups and outcomes since baseline	Eco[102]	PEAS	Oppty	Viva[103]	RV	LCSU	LCDK	ICL	Link[104]	HPA	Red	BRAC	VSO[105]	Camfd	TfAC	Varkey	VSO	Mercy	ChFnd[106]
	Uganda						Kenya		Eth	Rwa	Sou	Tan	Moz	Zam	Mal	Gha	Nepal		Afgh
Evidence challenges assumption about:																			
Barriers											✓		✓	✓	✓		✓	✓	
Interventions		✓				✓	✓					✓	✓			✓		✓	
Project adjustments to:																			
Target groups					✓	✓							✓		✓	✓	✓		
Outcome targets						✓								✓					
Intervention design		✓	✓			✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	
Specific adjustments to interventions:																			
Economic interventions		✓	✓					✓							✓		✓	✓	
Infrastructure and resources																	✓		
Teacher training and support		✓										✓				✓		✓	
Community interventions		✓				✓	✓	✓		✓	✓	✓			✓				
Extra-curricular activities												✓							
School management																			
Empowerment												✓							
Marginalisation																			
Violence																			

Five projects identified additional barriers they were not addressing between baseline and midline

Red (South Sudan) found that **mothers were very involved in girls' education** and their judgment could be a barrier in the same way as their fathers' judgment. VSO (Mozambique) identified additional factors affecting education outcomes such as household chores, girls' harassment, violence and abuse. In both cases, the projects adapted their interventions: the former included mothers in awareness-raising meetings, and the latter designed complementary interventions aimed at reducing and dealing with each factor in "*a more holistic manner*".

Additional barriers found at school level include a lack of support for head teachers identified by TfAC (Malawi), or teachers' absenteeism (Camfed (Zambia) and VSO (Mozambique)). Finally, some external barriers like the earthquake that occurred in Nepal in 2015 affected VSO (Nepal) and Mercy Corps (Nepal) projects, by destroying school and villages. It resulted in changes to VSO's (Nepal) interventions, which now focus on setting up semi-permanent learning spaces.

Some but not all projects adjusted their interventions after encountering implementation obstacles

For instance, HPA (Rwanda) intended to produce sanitary napkins but the production has not been allowed by the Rwanda Bureau of Standard and the Ministry of Health due to **difficulties encountered in reaching the required**

[102] Changes are not reported in the Eco Fuel (Uganda) report.
[103] Changes are not reported in the Viva (Uganda) report.
[104] Changes are not reported in the Link (Ethiopia) report.
[105] VSO (Mozambique) did not detailed the changes that were made as a response to the additional barriers found at midline.
[106] Changes are not reported in the ChildFund (Afghanistan) report.

manufacturing standards. As a response, the project rolled out other income-generating activities to buy sanitary pads.

LSCU (Uganda) also encountered obstacles related to its interventions: as **community members were not always available** for the community awareness sessions organised by the project, project staff decided to roll out these interventions through the media[107]. In addition, education authorities disagreed with the idea of placing community social workers in target schools, so the social workers had to adapt to the situation and commute to schools whenever needed. Similarly, LCDK (Kenya) decided to schedule monthly visits to the families of disabled girls in order to collect more information.

For BRAC (Tanzania), as many girls at government schools live far away, it was **difficult for them to travel** to BRAC clubs to attend the LSBE (Life Skills Based Education) sessions after regular school hours and then return home, so the trainings were eventually arranged at school. BRAC (Tanzania) also had to recruit *school teachers* for their out-of-school girls' clubs, after government school teachers opposed the idea of recruiting *tutors* in the communities.

Finally, PEAS (Uganda) adapted interventions after having evidenced that communities valued girls' education more that had been anticipated, and **re-focused community engagement work** in order to address other attitudinal barriers.

[107] LSCU (Uganda) does not specify which media (radio, TV, other).

Key findings – What has worked, why and with what effects?

Poverty-related barriers continue to be the most prevalent barriers to girls' education across IW projects at midline, with the main barriers being the cost of schooling, girls' domestic responsibilities, and inability of households to buy of basic school-related items, including sanitary pads and school meals. Of the 15 projects undertaking interventions to tackle issues related to poverty and livelihoods, five projects have reported positive changes related to the cost of schooling, but there has been no conclusive evidence of reduction of girls' household commitments or of increased ability of households to afford basic needs such as school meals. **Reducing the cost of education leads to increased attendance, but no effect has been evidenced to date on learning outcomes**.

In-kind support is the most successful intervention in reducing the cost of schooling, provided primarily in the form of school kits or sanitary pads. This type of intervention has been undertaken by ten projects, and findings show that **provision of in-kind support has a positive impact on attendance**. Sanitary pads have reduced costs and increased attendance but also reduced menstruation-related stigma and teasing. The **sustainability of in-kind support interventions is weak**, as the provision of these resources is not likely to continue after projects end. Additionally, the primary issue remains the affordability of school fees and school-related items, which the provision of in-kind support does not address.

Facilitating **access to loans or to scholarships has increased attendance and provides a more sustainable solution to addressing the cost of schooling** faced by households, as the sources of funding are external to the GEC. Scholarships and conditional loans are also a more secure way of ensuring that funds are directed to education, because their receipt is conditional on their allocation to school fees or school-related costs, such as school uniforms, books or sanitary pads. This has been shown to increase incentives to send girls to school in projects implementing loans and savings programmes.

With scarce supporting evidence, income-generating activities have been inconsistently successful in increasing household or community incomes, and there is no evidence of associated improvements in education outcomes. **Income-generating activities are not supported by a strong link between increased incomes and spending on education**, as the allocation of family funds is dependent on household choices over competing priorities and parents' attitudes toward education.

Evidence shows that **school-related barriers have reduced since baseline through better school facilities and improved pedagogy** among teachers by the 18 projects with interventions aimed at tacking these issues. By enhancing school accessibility, projects have increased girls' attendance, and seven projects have shown evidence of a positive impact on learning outcomes through reduction of school barriers.

Supply of school materials has a greater effect on learning outcomes when coupled with teacher training. Similarly, **on-the-job training for teachers (mentoring, performance monitoring, feedback) has been most successful in increasing learning outcomes**. Projects that have been successful through the implementation of teacher training programmes have gone beyond training teachers in classroom management and lesson planning, and have suggested concrete teaching strategies.

Interventions that are associated with **barriers related to girls' aspirations and decision-making ability**, such as **tutoring clubs and mentoring activities, have had positive impacts on either attendance or learning but have not shown a clear improvement in girls' confidence or aspirations**. While there has been no conclusive evidence of changes to these barriers since baseline, this does not necessarily mean that projects have been unsuccessful with their interventions. Socially-driven barriers tend to take a long time to change, and changes associated with these barriers are difficult to measure. In addition, community-based interventions involving visits to households and outreach activities led by community members have shown promising effects on changing attitudes towards girls' education.

Projects had unintentional positive impacts on boys through improved quality of teaching, community sensitisation, improved school facilities and the provision of separate toilets for boys and girls. These projects resulted in improved learning outcomes for boys by improving the school environment and changing community attitudes broadly related to education. However, some communities and children have expressed resentment and frustration to projects, as girls and boys were receiving unequal benefits (e.g. after-school clubs or snacks). After **complaints that girls' education was being improved at the expense of boys' education**,

some projects have modified their intervention designs to benefit boys as well as girls in contexts where both sexes are equally marginalised.

Violence has proven a difficult barrier to address as some forms of violence are culturally accepted and are not punishable through legal means, and as a result violence remains a widespread barrier to girls' education across IW projects at midline. Projects have primarily undertaken community engagement and sensitisation initiatives, but there has been **no positive change to the prevalence of violence at midline**. Due to the limited capacity and involvement of associated government bodies and the cultural roots of violence in various contexts, generally projects have not managed to have large impacts on violence. Where there is more reporting of violence against children, as seems to be the case for disability-related violence prevention, projects have been more able to improve violence-related attitudes through community engagement and sensitisation interventions. While **shifts in community attitudes were observed, these interventions have had no conclusive impact on educational outcomes in the projects' timeframe**.

Evidence shows a **lessening of in-school violence (in the form of corporal punishment and peer harassment), as well as a general increase in school safety**. However, projects have had no conclusive impact on harassment by teachers and are thus less able to address this issue. This type of violence is difficult to measure due to lack of accountability of school authority. For instance, teachers and school administrators can impact the reporting of violence by physically removing reports or by threatening children.

Lessons learned

- **Projects are unable to directly address some barriers to education as these are driven by structural or cultural factors**, which IW projects are neither equipped nor mandated to address as part of the GEC. This is the case for barriers such as poverty, conflict and violence. In the face of such structural barriers, projects are only able to treat the symptoms of these problems instead of tackling the barriers themselves.
- **Projects that address multiple constraints to learning have been more effective** in having an impact on learning. Some effective intervention models aimed at reduced school-based barriers have used this tactic, combining interventions to address low levels of teacher training, lack of materials and lack of structured pedagogy content. This was also seen in projects where the positive effects on attendance and girls' confidence through the provision of sanitation facilities and supplies was increased as a result of girls' clubs, where girls were able to speak freely about their difficulties related to menstruation.
- **Some interventions have had unexpected negative effects** in treatment communities. The most prevalent of these unexpected effects were resentment or discrimination against children eligible for or receiving benefits of the intervention.
- To be successful **projects must be ready to adapt to additional unexpected barriers to education or to external factors** that may impede implementation of their project interventions. Between baseline and midline, five projects identified barriers present in their target communities that interventions were not addressing between baseline and midline. Many projects experienced various delays due to changing political and economic environments that led to institutional restructuring, inflation-driven rises in costs of schooling, reduction in the length of the school period, and laws and policies that affected girls' education both directly and indirectly. Some projects also found the implementation of their interventions was affected by unforeseeable crises associated with violence and environmental disasters. In order to overcome these unexpected roadblocks to implementation, projects had to adjust their interventions to accommodate these factors, but not all projects have done so.

3.5 In what ways have IW projects demonstrated innovation and with what effects?

IW projects have been innovative in two ways – (1) in using existing resources and the immediate environment in an innovative manner (forming partnerships with local organisations, adapting skills training to issues faced by marginalised girls, mobilising communities, using existing media and means of communication), and (2) by providing new products or establishing new systems (implementing new technologies, designing new structures).

Working with local organisations and/ or bringing the expertise of specialised organisations has led to positive results, producing better designed interventions. Similarly, the implementation of new structures using innovative pedagogical skills to interact with marginalised girls generally showed positive effects on learning.

By contrast, introducing new technologies as a device to enhance educational outcomes led to more mixed effects, mainly because the implementation of a technology should correspond to a specific need, in well-known conditions.

The 19 IW projects have implemented a wide range of innovative interventions, in line with the scope of the GEC business case, which underlines the necessity to provide a balanced approach between providing support for projects with a proven track record, and supporting more risk-prone, innovative projects. Although the latter are more risky in terms of their capacity to deliver the expected outcomes, the rationale is based on the assumption that the GEC programme can have a greater impact if it is able to try new things, work with new actors, and leverage funds from other, different sources, than merely channelling extra-resources via existing routes.

As a result, the GEC FM, during the inception phase, defined 'innovation' in the context of the IW as:

- the application of a proven approach, for the first time, in a country or area;
- the adaptation of an existing initiative to a new context;
- the development of a sustainable solution to an existing problem;
- the formation or the improvement of new partnerships across sectors in support of girls' education;
- the development of ideas that come from girls and the involvement of the latter in project;
- the research and application of sustainable solutions that lead to long-lasting change; and
- the demonstration of the impact of new and existing innovative models so that the results can be shared.

In this section, and as a result of the activities designed and implemented by IW projects, we choose to make a distinction between **innovation by using existing resources and the immediate environment in an innovative manner** (forming partnerships with local organisations, adapting skills training to issues faced by marginalised girls, mobilising communities, using existing media and means of communication), and **innovation by providing new products or establishing new systems** (implementing new technologies, designing new structures).

Innovation by using and improving existing resources in the environment

Most of the projects implement their activities by using existing resources in treatment areas. Although those interventions are not about testing a new product or a new technology per se, the ways in which resources are mobilised in order to implement the project activities more efficiently can be labelled as innovative.

A few projects have established **partnerships with organisations and/ or structures already working with treatment communities**. For instance, Viva (Uganda) uses a local network of schools, churches and community-based organisations which acknowledge that they can achieve more by working together, sharing resources and advocating together for a change in government policy. Twenty of these 120 partner organisations host a Creative Learning Centre (CLC), which is a core output of the project. The 20 partners are also working together to present new models to education authorities, share a resource library and support a competitive league which allows children to develop their skills with regards to sports and the creative arts. Similarly, Raising Voices (Uganda) relies on existing Violence against Children (VAC) prevention centres, which are already well established in the communities. As a result of the centres' good relationship with influential community members, these partners have played a key role in advancing the implementation of the project by carrying out activities in schools and

communities, such as teacher trainings on the Good School Toolkit[108] methodology or the prevention of violence against children.

For both Viva (Uganda) and Raising Voices (Uganda), working with a partnership model enabled a shorter inception period. As these partner organisations are permanent and community-based, it made initial work at the community level easier, including in building local ownership of projects' activities. To ensure the sustainability of projects' activities, the capacity of partner organisations has been built to enable them to continue to run effectively after the project ends.

Other projects focused on establishing a **partnership with an organisation with a specific expertise in education**. These partnerships helped deliver high quality new curriculum materials and programmes such as life skills classes implemented by PEAS (Uganda) and Raising Voices (Uganda), or business skills courses and income-generating activities proposed by HPA (Rwanda) and PEAS (Uganda), as described in Box 7.

Some projects also **worked with national governments**. In Kenya, LCDK (Kenya) and ICL (Kenya) collaborated with the Ministry of Education (MOE). For instance, LCDK (Kenya) helped add disability indicators to the National Education Database in order to improve decision-making. The new indicators should enable the Ministry to track the number of children with disabilities, who are then targeted for accessing education. While the concrete effects of this initiative are not observable yet, this work also led the MoE's Department of Quality Assurance to offer support to the teachers working in LCDK (Kenya) targeted schools, to ensure the delivery of quality education. This support may have contributed to the project's effects on marginalised girls' educational outcomes.

ICL (Kenya) assisted the MoE with the implementation of the Biometric Student Information Management System[109], which aims to generate data on attendance at the national level. ICL (Kenya) supported the development of the system, and in particular helped some schools, which were reporting transfers to other schools as 'drop outs' in the system, to keep better records of enrolment and attendance. PEAS (Uganda) also initiated a partnership with the Ugandan Ministry of Education and Sports in the context of the government Universal Secondary Education (USE) programme, with the objective of reducing school fees. However, this initiative did not lead to the intended effects, as discussed in Section 3.4.2.

Box 7: IW projects' work with private partners – 'Teach a Man to Fish'

In order to implement school-based income-generating activities, PEAS (Uganda) and HPA (Rwanda) worked in partnership with *Teach a Man to Fish*, an international education charity committed to tackling global poverty by teaching students business and entrepreneurial skills in order to generate income for schools.

PEAS (Uganda) created business clubs in order to improve the relevance of education by providing girls with practical learning opportunities through school projects. The project entrusted *Teach a Man to Fish* with the piloting of these clubs. This partnership has helped deliver high quality new curriculum materials which have driven improved learning results among girls in PEAS (Uganda) schools. It has been observed that these school businesses were not just a money-making enterprise, but that they also contributed to motivating girls, captivating them, improving their attendance rate, and making them feel that the skills they were acquiring would be useful in their careers after graduation.

Similarly, HPA (Rwanda) established an "Education that Pays for Itself" model in target schools. *Teach a Man to Fish* introduced business skills to schools by teaching students how to run their own profit-making, student-led businesses. Parent-Teacher Associations (PTAs) and School Management Committee members have also benefited from the business training. This activity has been associated with an improvement in numeracy, a perceived relevance of schooling as being important for employment-related skills, and is part of HPA's (Rwanda) sustainability strategy.

[108] Good School Toolkit is a practical, step-wise methodology developed by Raising Voices in collaboration with schools and parents over a several year process. It is based on a simple and intuitive equation: Good School = good teachers plus good learning environment plus responsive and progressive administration. These practical ideas are presented to the teachers in a creative format using colourful learning materials and processes, technical assistance and peer support.

[109] Biometric Student Information Management System (BioSIM), developed by Data Vault System Enterprises in partnership with ICL (Kenya) is a web based application designed to automate the attendance of students by iris recognition. This device provides the ability to manage data from enrolment, students' attendance, students who are late, educational performance, school fees payment, teachers' attendance, teachers who are late, parents' attendance during school meetings. BioSIM also offers the Ministry of Education Science and Technology a platform that assesses schools and generates a report in real time.

Overall, using the existing resources from the targeted communities' environment led to a wide range of results. Collaboration with community-based organisations supports projects' sustainability, although the capacity of these partner organisations matters. Working with specialised organisations has led to positive results, resulting in better designed interventions.

Innovation by providing new products or establishing new systems

Projects also chose to **provide new products, technologies or structures**, for instance, by opening new educational structures and testing new technologies.

Creation of new educational structures was at the core of some IW projects. PEAS (Uganda) opened secondary schools in rural marginalised communities, bringing access to affordable, quality secondary education to the girls of these communities for the first time. In those schools, girls (and boys) that received a condensed version of the national curriculum achieved 100 percent pass rate on the national exam. Viva's (Uganda) Creative Learning Centres allows out-of-school girls to follow a six-month creative catch-up programme to be accepted into regular schools. Similarly, LCSU's (Uganda) innovative approach of building mobile health assessment facilities instead of waiting for the parents to bring their children to a static health centre allowed girls with disabilities to be assessed, and consequently enrolled in school.

When educational structures are already present but considered inefficient, **some projects have turned towards new technologies as a mean to address barriers to attendance and learning**. The BioSIM technology, implemented in schools targeted by ICL (Kenya), is a good example. Despite the issues with data recording discussed above, BioSIM tracing allows school staff to identify the girls that are at risk of dropping out. The system also reassures parents that their daughter is in school and safe, as they receive a text message as soon as attendance is registered at school.

Varkey (Ghana) rolled out the MGCubed distance learning platform, offering new content to students, such as empowerment classes in which successful women talk about their experience. This technology also allows interaction with the instructors and with peers from other schools. Distant teachers deliver classes in an innovative way, as McCubed focuses on oral skills rather than written skills.

Finally, ChildFund (Afghanistan) set up MLearning, a mobile phone platform for illiterate members of the community. However, treatment communities report limited use of this platform, as households have either been unable to afford a mobile phone and/ or struggle with the technology.

Overall, innovation by establishing new systems has demonstrated some positive effects. Implementation of **new structures using innovative pedagogical skills** generally showed positive effects on learning. Introducing **new technologies as a device** to enhance educational outcomes led to more mixed effects, mainly since the implementation of a new technology did not always correspond to a specific need and/ or did not account for the environment/ capacity of the end users.

3.6 How scalable and sustainable are the activities funded by the IW?

The Innovation Window has exceeded its match funding target, largely through additional cash and in-kind investments by a combination of local communities, schools, partners and the grantee organisations themselves. Leverage is predominantly described and presented as means of delivering project activities rather than as a means of sustaining them beyond the life of the projects.

Complementarity has been evidenced and interpreted as mainly collaboration with partners who directly implement project activities rather than coordination with other programmes to achieve synergy effects. IW projects have effectively engaged and involved local communities in project activities. They have also effectively used schools and existing school structures to support changes in the ways in which education is delivered both within school and with local communities.

There is insufficient evidence explaining how and why communities and schools will be able to continue to sustain project activities and benefits beyond the life of the project. Projects are engaging and influencing government, but institutional behaviour change is taking time. For some projects this is happening too late in the process to achieve the changes needed by the end of the project. IW projects have identified important pre-conditions for sustainability and taking activities to scale, but there is little consistency across IW projects. By the end of the programme in April 2017, it is likely that some activities may be sustained for a few projects, but at the moment the evidence suggests that the bulk of IW project activities will not be sustained.

3.6.1 GEC approach to sustainability in the IW

Sustainability was defined at the programme level of the GEC through two programme logframe outcome indicators:

- **Outcome 3: Match Funding**[110] – *Additional match funding secured alongside DFID GEC funds*.
- **Outcome 4: Sustainability** – *Number of projects that have mechanisms in place to enable marginalised girls to complete a full cycle of education.*

All projects include outcome indicators that are defined in more or less the same way as the programme level indicators. Examples of where project level indicators vary are provided below.

Examples of Project Outcome 3: Match funding indicators:

- *Additional funds secured during the life of the project alongside DFID GEC funds to support the marginalised girls.*
- *Leverage generated during the life of the project alongside DFID GEC funds to support the marginalised girls.*

Examples of Project Outcome 4: Sustainability indicators:

- *Project has established mechanisms to enable marginalised girls to complete a full cycle of education. (Indicator Metric: Number of new schools in which MGCubed model is requested by the Government of Ghana, or other Governments).*
- *Project has established mechanisms to enable marginalised girls to complete a full cycle of education (# of PEAS policies promoting girls education, including admission policies, girls' policies and pregnancy policies, in place and approved by the Trustees).*

The sustainability outcome (4) indicator has the greatest variability in the way that projects have interpreted and defined what is meant by 'mechanisms', which has generally been defined in the way that the milestones and targets are described more than the indicator itself. The variability in how projects view sustainability is reflected in the sustainability sections of their midline evaluation reports. This may reflect a lack of consistent understanding across IW projects about what is meant by a 'mechanism' in the context of sustaining GEC project activities that

[110] The GEC Grant Handbook defines eligible match funding as funding that is: (1) *In place* – funds are held in an account in the Recipient organisation's name; or (2) *Committed* – funds are committed to the Recipient irrevocably for this project and are expected to be forthcoming for the subsequent years of the project; or (3) *Free of obligation* - funds without obligation to any third party.

enable marginalised girls to complete a full cycle of education. This suggests that the girls benefiting from the support provided by projects should continue to benefit as they progress with their education.

In Project Midline Evaluation Reports, projects were required to respond to the following questions:

- What is the project's sustainability strategy?
- To what extent has the project identified the pre-conditions for scaling up and /or sustaining its activities and results?
- How has the project strategically engaged with other organisations to achieve complementary effects?
- To what extent has the project leveraged additional investment?
- What are your plans for delivering sustainable results?
- What are the lessons learned about the scalability and sustainability of the activities delivered?

At baseline, there was very little, if any, information or evidence relating to the sustainability of the projects' interventions with little or no discussion of the implications of the baseline findings for the projects' sustainability plans. The EM's Baseline Report recommended that projects should consider these implications and may need to conduct further research to revise and strengthen their sustainability plans.

At midline, we found that most Project Midline Evaluation Reports covered sustainability except for Eco Fuel (Uganda) and Mercy Corps (Nepal). Almost all reports covering sustainability followed the guidance provided. Generally, the reports responded to the questions set out above. However, many reports struggled to provide sufficient evidence that explained *how* activities or benefits would be sustained, by whom and when. A lack of reported evidence of sustainability may not necessarily mean that project activities are not sustainable. Although there may be a potential reporting deficit for some projects, our findings are based on the evidence reported by projects.

3.6.2 To what extent has the IW leveraged additional investment?

The GEC Annual Report (July 2016) submitted by the FM reports that for 2015/16 the IW exceeded its midline match funding target of £4.8m achieving match funding of £6.1m[111], which represents a 127 percent over-achievement. At the end of March 2016 £28.4m of funding had been disbursed to IW projects supporting 179,900 girls with improved learning – for every £1 of DFID expenditure, IW projects have achieved 17 pence of match funding (a ratio of 1:0.17) in 2015/16. By comparison:

- GEC Step Change Window (SCW) projects (£125.6m disbursed /449,300 girls with improved learning) achieved match funding of £12.5m (a ratio of 1:01); and
- GEC Strategic Partnership Window (SPW) projects (£20.6m disbursed /110,010 girls with improved learning) achieved match funding of £25m (a ratio of 1:1.21).

While interesting, these match funding ratios are not directly comparable because of the different objectives of the funding windows. IW projects were designed to deliver small-scale innovative projects with budgets of up to £2m. SCW projects were designed to adapt tried and tested approaches to deliver results quickly and at scale with budgets of up to £30m. SPW projects are partnering with four private sector partners: Coca Cola; Avanti; Discovery Learning Alliance; and Ericsson who are required to co-fund (through cash and in-kind contributions) their DFID funding of up to £15m.

However, the IW has performed relatively well compared to the SCW in particular. SCW projects were meant to be tried and tested approaches and less risky than IW projects. The smaller-scale and (in theory) riskier IW projects have levered in more additional investment than the SCW.

The latest FM's programme management information about match funding[112] includes data for 16 out of 19 projects. FM match funding data was not available for LCSU (Uganda), LCDK (Kenya and ICL (Kenya). GEC projects are set a match funding target that they are required to achieve by the end of the projects' lifetime. On average, the 16 projects reporting match funding have achieved 66% of their targets. At midline, the IW window achieved: £951,873 match funding in Year 1; £1,782,176 in Year 2: and £1,691,530 in Year 3 to March 2016. On

[111] Reported to the Fund Manager through project Quarterly Expenditure Reports (QERs)
[112] FM GEC Project Match Funding programme management data 22 November 2016.

average, IW projects have achieved £375,922 match funding per project. However, this masks a large difference between the smallest amount of match funding achieved by BRAC (Tanzania) who reported £28,845, and the largest amount achieved by Eco Fuel (Uganda) who reported £2,454,594 (41 percent of the total match funding for the IW). Many projects did not include their reported match funding figures in their midline evaluation reports. There are also several discrepancies between data provided in project midline evaluation reports and the FM data. This is most likely caused by a time lag between the two reporting processes.

Match funding potentially provides an indication that stakeholders buy into the concept, aims and objectives of projects. But this does not necessarily mean that match funding is available to sustain project activities or support girls' education beyond the life of the projects. This needs to be explained as an integral part of projects' sustainability strategies and evidenced when reporting against them.

Projects achieved their leverage targets through contributions from partners and communities

The scale and type of additional investments levered by projects generally reflects the small-scale nature of projects and strong stakeholder engagement focus at the local level. PEAS (Uganda) for example, reported achieving c. £932,000 of additional investment against a target of £711,000[113]. These investments contributed to: a School Tool (school information management system) through a partnership with ARK; six pilot Income-Generating Activity (IGA) projects through a grant from MasterCard /PSIPSE; construction of four new schools through funding from a combination of The Costa Foundation, The Danson Foundation, The Four Acre Trust and BFSS (British & Foreign School Society); ICT curriculum through a funding partnership with the SITA Foundation; and teacher training through additional funding from organisations including The Segal Foundation and ARK.

Varkey (Ghana) reported levering about £1m[114] from the Varkey Foundation and GEMS Education Solutions to cover the cost of curriculum development and teacher training. Alongside Eco Fuel, this is also a significant contribution (about 15 percent) of the total match funding (c. £6.1m) achieved to date for the IW as a whole.

Several projects struggled to report or evidence additional investment

Several projects were unable to report any additional investment. Red (South Sudan) was unable to report any cash or in-kind match funding but is currently negotiating with UNICEF to fund the construction of eight classroom blocks[115]. BRAC (Tanzania) did not report any additional investment[116] but is bidding for further funding. ChildFund (Afghanistan) did not cover leverage in the sustainability section of its report. LCSU (Uganda) also did not report any additional investment[117], but mentioned 13 unsuccessful funding proposals that had been submitted to date. Link (Ethiopia) provided little evidence of leverage. For some of these projects it's not clear whether the reports have considered in-kind contributions from the communities and partners they work with as well as cash contributions. In some cases, under-reporting of leverage may also be a case of a deficit in reporting rather than a lack of actual additional investment by stakeholders.

Leverage was mostly reported as a means of delivering project activities rather than sustaining them

Leverage was generally the weakest part of the sustainability sections in the Project Midline Evaluation Reports. Most of the evaluation reports described the ways in which the additional investments were used to support the delivery of project activities. There was little evidence or explanation of the extent to which these investments would help continue activities or help support beneficiaries after projects had finished. Other parts of the reports did explain how projects engagement and involvement of stakeholders at national, district and local levels could help sustain activities. However, few reports described the additional investments levered in by projects (depending on the type of investments levered) as a key indicator of the commitment of partners and communities to carry on supporting activities after the end of the projects.

At this stage it is hard to judge whether the amount of additional investment levered in by IW projects is sufficient to sustain activities or educational opportunities beyond the life of the projects. At the end of the projects in 2017 it should be clearer what contribution these additional investments will make to sustaining project activities and the benefits they have delivered for projects' beneficiaries.

[113] FM data currently shows total match funding for PEAS at £342,083 (48% achieved against target) at the end of Quarter 12 (March 2016).
[114] FM data currently shows total match funding for Varkey at £808,159 (80% achieved against target) at the end of Quarter 12 (March 2016).
[115] FM data currently shows total match funding for RED at £71,141 (59% achieved against target) at the end of Quarter 12 (March 2016).
[116] FM data currently shows total match funding for BRAC at £28,845 (18% achieved against target) at the end of Quarter 12 (March 2016).
[117] FM data does not include any match funding data for LCSU.

3.6.3 Have projects strategically engaged with other organisations to achieve complementary effects?

Most projects report on their complementarity by describing their implementation partners and the advantages they provide in delivering activities. A few projects have explained how these partnerships will help sustain activities beyond the life of the project. These projects have provided evidence of strategic engagement to achieve complementary effects by aligning with government institutions at different strategic levels – such as Varkey's (Ghana) engagement with government at national, regional and district levels, and its ongoing relationship with the Ghana Education Service (GES).

However, very few Midline Evaluation Reports describe projects' strategic engagement with other organisations who are not direct stakeholders delivering the project, but could help deliver mutual benefits. There is very little discussion in Project Midline Evaluation Reports of other girls' education initiatives or activities in other sectors that could help contribute to projects' education outcomes, such as non-GEC WaSH programmes or school feeding programmes. Examples of reported complementary programming include:

- LCDK (Kenya) used a government cash transfer programme, which provides financial resources to support disabled children to enroll 124 disabled girls; and
- VSO (Nepal) liaised with another partner working in the same area (Children for Tomorrow), delivering a scholarship programme based on academic merit and parents' socio-economic situations.

3.6.4 To what extent have IW projects influenced changes in the behaviour and the practice of others?

Projects have effectively engaged and involved local communities in project delivery

Projects' Midline Evaluation Reports showed that from the start most projects considered community support for girls' education as critical to successfully achieving improvements in educational outcomes. Many projects reported successfully engaging local communities, raising awareness about the barriers to girls' education and involving communities in the management and delivery of activities. It is clear from the amount of cash and in-kind resources invested by local communities that IW projects have sensitised and mobilised communities to play an active role in supporting girls' education. For example:

- Parent Teacher Associations (PTAs) and local communities were reported as being highly involved in the delivery of HPA's Rwanda Education and Advancement Programme (REAP), to the extent that 'local masons and plumbers were used to construct the facilities. Communities, masons, and plumbers received training to maintain the facilities after the project life without external support'; and
- Red's (South Sudan) midline evaluation reported that the voluntary role of school mothers was seen as critical to the success of the project because fathers trust them to protect their daughters from perceived predatory behaviours of male teachers at school.

Projects have used existing school structures and school-based activities to support changes in practice

For many IW projects, existing school structures have provided the platform for developing new education practices within school and new activities that engage communities more in girls' education. For example:

- Camfed (Zambia) used its longstanding relationships and engagement with school districts to convince 251 teachers to give up their own time to be trained in a new child-centred teaching methodology;
- LCDK (Kenya) reported that they used existing school structures, such as school management committees and MoE Quality Assurance Officers to advocate and support inclusive education practices for children with disability;
- HPA (Rwanda) reported mobilising communities to establish 28 school-based mother daughter clubs (MDCs). HPA developed their business skills as well as those of PTAs to support sustainable income-generating activities that enable marginalised girls to afford the costs of schooling; and
- VSO (Nepal) reported that 'School Management Committees (SMC) and Parent Teacher Association (PTA) members have been oriented on gender issues and their roles to address them by ensuring that School Improvement Plans (SIPs) are gender sensitive. The project will now focus on building their capacity to monitor implementation of SIPs by providing a simple checklist for monitoring'.

Insufficient evidence explaining how and why communities and schools will be able to continue to sustain project activities and benefits beyond the life of the projects

Projects relying on communities and schools to continue supporting activities beyond the life of the project often do not explain how and why this support will continue. For example, Camfed's (Zambia) Midline Evaluation Report explained that they had under-estimated the negative impact of teacher absenteeism and trained teachers transferring to other schools. LCDK (Kenya) also reported that the 'transfer of trained teachers hampered the implementation of project activities and timelines. The project had to keep re-training new teachers to implement the activities'. ICL (Kenya) also reported the negative effect on the sustainability of the project's activities due to 'teacher reshuffling'. High levels of teacher absenteeism and teacher turnover is likely to compromise project sustainability strategies that rely on individual teachers to either continue to support activities or to cascade their knowledge or skills to other teachers.

Link (Ethiopia) reported that the project acknowledged that 'attitude change in girls, parents and community can grow over time, but this process need continuous support'. Without the ongoing support of resilient formal or informal infrastructure, it is not clear in project evaluation reports how community groups would have the capacity to continue supporting project activities, particularly newly established community groups. For example, BRAC (Tanzania) is planning to 'make an alumni association of the in-school girl mentors so that they can be utilised in future by the schools to develop the next generation of peer mentors'. However, it is not clear what would incentivise and motivate girls to continue to undertake this role after they have left school. Similarly, VSO (Nepal) assumes that big sisters and adult champions will continue to encourage other members of the community to expand the mentoring programme. There is no explanation of who will support the big sisters to do this and whether they would be able to take on this initiative themselves.

Projects are engaging and influencing government but institutional behaviour change is taking time and for some projects it seems too late in the process to achieve the changes needed by the end of the project

IW projects recognise the importance of engaging with government at multiple levels for both strategic and operational purposes. They have engaged with government ministries of education and provincial /district education offices directly and indirectly through forums and networks. Projects have predominantly used these to disseminate and share information and lessons learned to influence and shape policy. However, a lack of government funding was reported as a common constraint to sustaining project activities. Varkey (Ghana) is about to 'kick-start' its stakeholder consultation on sustainability. Influencing policy change takes a lot of time and needs to be planned and built into project implementation from the start particularly if the sustainability strategy is dependent on finding further funding. Varkey (Ghana) is looking to find ways to off-set and reduce the high start-up costs and ongoing maintenance costs of its ICT infrastructure by expanding its use in school and finding further funding. Varkey (Ghana) has replicated this model through another donor, Dubai Cares, who are funding its roll out across 500 schools in Ghana's Eastern Region. However, at this stage it's unclear whether activities in GEC-supported schools can be continued without further funding from the government or other donors.

For some projects a change in government policy appears to be an absolute pre-condition to being able to sustain the benefits delivered by the project. For ChildFund (Afghanistan), its sustainability strategy is dependent on the government taking over activities designed to specifically support nomadic populations in northern Afghanistan. The government does not have the resources to take over the type of community engagement and outreach activities that are critical to the project's approach. The Project's Midline Evaluation Report explains that the alternative approach of their target girls attending government schools would not work because of their nomadic lifestyle. The only option for the project is to raise funding from the communities themselves, which given their economic situation does not seem feasible. The Project's Midline Evaluation Report found that there was miscommunication at the start between the government and the project. It also states that sustainability was not a major focus throughout its inception and implementation phases.

3.6.5 To what extent have IW projects identified the pre-conditions for scaling up or sustaining their activities?

There was very little evidence or discussion of strategies or pre-conditions relating to scaling up – this may be because with one year of implementation remaining it is still too early in the process to identify what could and should be scaled up. Projects' Midline Evaluation Reports did identify several pre-conditions for sustainability that were frequently reflected in projects' plans for sustainability as well as in their key lessons learned. The key pre-conditions identified are:

- **Robust evidence of the effectiveness and impact of an approach is needed to demonstrate and influence** key stakeholders. If a project's sustainability strategy depends on stakeholders taking on an activity or changing the way that they work then they need convincing evidence that the activities work, particularly if this requires them to commit additional funding or resources.
- **Projects need to identify and demonstrate which types of interventions or activities have proved most effective.** As a key part of its sustainability strategy, LCSU (Uganda) intends to identify which activities have had the greatest impact. LCSU acknowledges that there are not enough resources available to pay for similar levels of such resource-intensive support for children with disabilities. Link (Ethiopia) also identified in its Midline Evaluation Report that it needed to identify its most impactful interventions (i.e. additional tuition, sanitary materials and counselling for teachers) to ensure that these were prioritised for continuation after the end of the project.
- **Projects need to explicitly acknowledge when realistically the best sustainability strategy is to seek further external funding.** PEAS (Uganda) identified that to avoid passing costs on to communities, it needs more external funding to cross-subsidise its schools in light of a lack of an adequate PPP financial model at the moment. The midline evaluation reports that PEAS is currently negotiating a PPP with the government, which it sees as critical to sustainability in the future.
- **Projects need to engage government institutions at national, provincial /district and local levels as early as possible.** Projects often need this engagement to extend beyond networking and sharing information. Several projects have tried to involve government in aspects of planning, design and delivery to build tangible ownership of the process and the outcomes delivered. The ChildFund (Afghanistan) Project Midline Evaluation Report though highlights a lack of direct engagement of the MoE in project activities as a possible reason why ministry officials seem to lack awareness of the value of the outreach work and approach being used.

  In some cases, political support for the project's objectives is a critical success factor for achieving relatively short-term results as well as longer-term sustainability. For example, Red (South Sudan) has engaged Education County Supervisors and Payam Education Inspectors to support the delivery of the project's activities. In May 2015 Camfed (Zambia) took a government delegation to Colombia to observe FEN schools as a way of building political commitment to adopt this new approach to teaching nationally. However, Camfed's (Zambia) Project Midline Evaluation Report also highlighted the need for robust evidence to demonstrate the impact and effectiveness of the approach to convince schools and government to change current teaching practices.

Key findings – How scalable and sustainable are the activities funded by the IW?

The IW exceeded its midline match funding target of £4.8m to achieve match funding of £6.1m, which represents a 127 percent over-achievement.

We found from the Projects' Midline Evaluation Reports that IW projects have engaged with stakeholders and partners and, to varying degrees, are in the process of planning and discussing different sustainability strategies. However, with one year of project implementation remaining, we generally found little evidence of concrete progress beyond planning and discussion stages.

The sustainability strategies for many projects seemed to be based on a continuation of initial stakeholder engagement strategies that are focused on project implementation. Few projects were able to demonstrate evidence of an acute understanding of the key drivers and barriers to sustaining the most effective, impactful and critical activities.

IW projects are eligible to apply for further funding through the successor programme to the GEC. The prospect of further funding for IW project activities may impact on projects' motivation to actively progress their sustainability strategies in this phase. Projects' Endline Evaluation Reports should provide tangible evidence of what has been sustained, by whom and with what anticipated long-term effects. However, at this stage in the life of the programme, with perhaps a few exceptions that have been highlighted, the evidence available suggests that many IW activities will not be ready to be scaled up or sustained by the end of the programme in April 2017.

3.7 To what extent does the IW represent good value for money?

Only 10 out of 19 IW projects completed the value for money section in their Project Midline Evaluation Reports. Generally the quality of the value for money assessments that were available was very poor. A few projects advised in their reports that they would be undertaking comprehensive cost analysis and cost-effectiveness analysis in the final year of their projects, which will be reported in their projects' endline evaluations.

Overall there was little useable evidence in the reports to analyse or draw any meaningful value for money judgements across the IW. At the programme level our value for money assessment is driven by the scale and type of impact on education outcomes for marginalised girls that has been achieved to date. On this basis, it appears that at the end of the second year of implementation that the IW as a whole has had a relatively limited impact on the educational outcomes of the targeted girls. When combined with the lack of evidence submitted in the Project Midline Evaluation Reports, at this stage in the life of the programme, it is difficult to draw definitive conclusions about the value for money of the IW.

3.7.1 Approach and project response

Our approach to assessing the value for money of the IW at the midline stage (i.e. two years into the three year project implementation period) is to:

1. **Use our midline findings from this window-level impact evaluation** to determine the value generated to date by IW projects. DFID's Business Case for the GEC assumes that there are educational barriers that affect boys and girls, but that girls face a number of additional, gender-specific challenges which put them at a disadvantage in comparison with boys. According to this rationale the impact of the IW should reduce evident disparities in education outcomes between marginalised girls targeted by projects, other less marginalised girls and in particular boys in the same contexts. These findings were informed by the FM's Metrics Report[118] for the GEC produced in November 2015. We have used and referred to these previously in this report to estimate the proportion of budgets spent on different types of activities and interventions. With the programme data available, it is not possible to break down project expenditure by sub-groups of girls reached or benefiting and there is very little or no data relating to boys learning outcomes or participation in education.
2. **Use the evidence of value for money presented in the IW Project Midline Evaluation Reports.** Projects were provided with the following structure and guidance[119] about how to evaluate and report their value for money at midline:
    - *Describe and evidence the extent to which key decisions and options that were considered about the design and delivery of the project have explicitly driven decisions about the scale and types of costs that have been incurred to date to ensure that best value for money is achieved [cost drivers].*
    - *To what extent has the project been efficient in delivering its outputs?*
    - *What types of interventions are proving most cost-effective in terms of their effects on the project's outcomes, for whom and under what types of conditions?*

Out of the 19 IW projects the following nine projects provided very little or no evidence of their value for money in their Project Midline Evaluation Reports:

- Mercy Corps (Nepal) – no value for money section;
- Eco Fuel (Uganda) – no value for money section;
- BRAC (Tanzania) – no value for money section;
- ChildFund (Afghanistan) – no value for money section;

[118] PwC (2015), 'Value for money (VfM) metrics on the Girls' Education Challenge – Report on VfM expenditure metrics for the GEC Year 1 and 2: January 2013 – March 2015'. This report uses VfM metric tables created in 2013 as a tool for calculating economy VfM indicators for Years 1 and 2 of the GEC. We also used the FM's Metrics Report for Year 3 that was made available later on in the preparation of this report – Year 3 data has only been used to fill gaps in the financial data for Years 1 and 2.
[119] Fund Manager (July 2015), 'Project Midline Evaluation Report Template' p.11.

- Raising Voices (Uganda) – no value for money section;
- TfAC (Malawi) – no value for money section;
- Camfed (Zambia) – no value for money section. The report stated that 'during the last year of the project a costing analysis of the new pedagogy and interventions related to student retention and child protection will be undertaken. Using project cycle data, the analysis will look at both the cost of setting up and delivering the new pedagogy and the cost of delivering the various different elements of the Camfed model'.
- HPA (Rwanda) – no value for money section. The report stated that HPA could not find the value for money expertise required. The project is planning to conduct a detailed VfM analysis and a costing exercise to determine the value for money of each component individually and as a whole for national level roll-out of its activities.
- Link (Ethiopia) – a very short section on value for money was provided but with very little analysis or commentary on value for money.

Out of the remaining ten projects five broadly followed the guidance provided: CSU (Uganda); Red (South Sudan); Viva (Uganda); Opportunity (Uganda); and Varkey (Ghana). The other five projects structured their value for money evaluations in different ways.

Overall the quality of the reported evidence for value for money was generally very poor. Little or no evidence does not necessarily mean that projects are not achieving value for money. Conversely though, at this stage in the life of the IW there is little reported evidence to suggest that projects are delivering results that are economical, efficient or cost-effective. A few individual Project Midline Evaluation Reports provided some useful analysis that are referred to in the following sections. We acknowledge that by focusing on examples from those projects that attempted to complete the value for money section that they could receive undue and unfair attention because of their efforts. So, it should be noted that the commentary in the following sections is intended to gain as much learning about value for money from these projects' perspectives, rather than suggesting that they are achieving less value for money than other projects. In fact, these projects should be credited for attempting to undertake some value for money analysis, which remains a challenging and complex area for projects to evaluate.

3.7.2 What design and operational factors have driven decisions about the costs that projects have incurred?

Only a few Project Midline Evaluation Reports discussed the decisions they made about the scale and type of costs that have been incurred. To achieve best value for money, projects need to make the best resource allocation decisions possible at each stage in the life of their projects. The following project examples represent the best examples provided across the IW:

CSU's (Uganda) Midline Evaluation Report described the way that the project had adapted to respond to changing conditions and as a result was able to generate more value – for example: by expanding the number of girls targeted following delays due to late government approval; and deciding to include additional schools after finding out that it was cheaper than anticipated to deliver to the ten schools originally targeted.

Red (South Sudan) decided to focus on demand-side barriers (i.e. cultural beliefs and values that it perceived were most important). While it's good that the project considered different options for intervention, the value for money case would have been strengthened further by providing evidence that this decision proved more effective than the others considered. The report continues to discuss the effectiveness of the use of school mothers to support activities as a demand-side intervention, but without analysis of the costs or cost comparisons with other types of interventions it is difficult to draw any conclusions about cost-effectiveness.

Varkey's (Ghana) Midline Evaluation Report extensively discussed the reasons why resources were allocated to different types of costs and provided a justification for these decisions. Likewise, this value for money analysis could have been strengthened by evidence showing that these were the 'best' or most effective decisions compared to other options available to the project. The Midline Evaluation Report provides good lessons learned that provide options for changing the way that project equipment is used and deployed to improve its utility, value added, affordability and ultimately its potential sustainability.

3.7.3 What types of interventions are proving most cost-effective, for whom and under what types of conditions?

Several Project Midline Evaluation Reports briefly commented on which interventions were considered most effective. However, these judgements were rarely accompanied by any consideration of the costs of each intervention and comparisons between them. Furthermore, in response to the GEC's rationale of reducing disparities in education outcomes between girls and boys, IW projects need to ultimately prove that their activities are proving effective in achieving this goal to demonstrate value for money. IW projects reported little or no evidence of changes in gender gaps in education as a result of their interventions, which makes it difficult to determine whether the interventions have been effective or cost-effective in this respect.

Varkey (Ghana) commented that extensive value for money analysis would only be undertaken at endline. This is a missed opportunity at midline, especially from a sustainability perspective. Varkey's intervention involves high capital costs and operational costs to maintain the ICT equipment. Key government stakeholders who have few resources and many competing demands, in particular the Ghana Education Service, need to be convinced of the business case and education benefits that will be achieved by reallocating their budget to this type of approach. Leaving the value money analysis until the endline evaluation reduces the time available to influence government to provide funding and compromises the strength of the project's commercial case for continuing these activities.

PEAS (Uganda) reported that at the time of the evaluation it was updating its budget and as a result could not conduct any cost analysis. However, the project did provide a cost per beneficiary unit cost for each of its 19 different types of interventions. These provide potentially useful benchmarks as a starting point for cost-effectiveness analysis. This analysis would have been more useful if a 'beneficiary' was clearly defined. For cost-effectiveness analysis the project should be comparatively assessing which of the 19 interventions or combinations have had the greatest effect on literacy and numeracy outcomes, for whom and why – this should include consideration of which type of interventions have been effective in reducing evident gender gaps in education at what cost. ICL's (Kenya) Midline Evaluation Report also includes useful cost-effectiveness analysis, which compares unit costs for each output with the findings from the evaluation that identify which outputs are having the greatest effect on the project's outcomes. On the basis of this evidence the evaluator recommends:

> *There may have not been adequate rationalisation of the budgets across the 5 outputs. The project team needs to commit resources where there are likely to be highest results and there is need for all outputs to have some rationalisation. Currently, the budget allocation gives the impression that Output 3 and 4 are not key outputs.*

While, it is not clear in the report whether the ICL will act on this, this is a reasonable piece of cost-effectiveness analysis that the project should consider when reviewing its effectiveness.

3.7.4 To what extent have IW projects been efficient and economical in delivering their outputs?

Several Project Midline Evaluation Reports mention competitive procurement and recruitment processes to ensure they achieve the best price and the recruit the best people. Viva (Uganda) mentions clustering activities to reduce costs, sharing costs through network activities and leveraging in resources from their networks. Viva also provides unit costs for each graduate, teacher trained, graduate family and child participant. This analysis would have been strengthened by using comparable benchmarks to enable cost comparisons of these intermediate outcomes. One option would have been for the project to use unit costs for results that were forecast at the start of the project and comparing these with the same actual unit costs at midline. These types of self-referenced comparisons are helpful for identifying key factors (drivers and barriers) that have affected the input costs and potentially the cost-effectiveness of different types of activities over the course of the delivery period. Opportunity (Uganda) provides detailed analysis of how GEC capital has allowed the bank to re-invest and cross-subsidise to create multiplier effects on its financial flows. This could also have been strengthened by making clearer how this has helped the project deliver its outcomes more cost-effectively or efficiently.

3.7.5 Summary of key findings from the impact evaluation of the IW

The value for money of the IW as a whole at midline should be informed by:

1. education impacts to date on targeted girls compared to other girls and in particular boys, which is the ultimate objective of IW projects and the value that projects add;

2. projects' effectiveness in addressing barriers that could potentially impact on girls' education outcomes at endline as well as midline – it is important to recognise that some types of intervention may take longer to have an effect on the key barriers affecting education outcomes; and
3. the potential sustainability in terms of the activities they have delivered and the persistence of the benefits realised by the girls that the projects have targeted and reached.

Box 8 below provides a short summary of the key findings presented in previous sections. The purpose of this summary is to collate in one place the most relevant headline findings that help inform an interim judgement about the overall VfM of the IW at the midline stage.

Box 8: Summary of key findings relevant to the midline VfM assessment of the IW

Reach and equity

The majority of IW projects (13 out of 19) have succeeded in reaching their target number of learning beneficiaries, and another six projects are on track to reaching their target numbers by endline. Findings suggest that IW projects target girls who are disadvantaged across a variety of dimensions that differ across project areas. The evidence also suggests that non-GEC activities are taking place in some treatment and control areas and address similar educational barriers. This makes more difficult to capture the effect of GEC statistically, both in terms of reach (as captured through exposure questions) and impact (on girls going to school and learning).

Impact on learning

DFID's Annual Review of the GEC[120] reports that the IW did not meet its logframe target of 179,900 girls with improved learning outcomes by 24% (achieved at midline: 136,954 girls with improved learning outcomes) – this includes both girls who met the set learning targets and those who outperformed their peers but did not meet learning targets.

Literacy

From the EM review of project midline evaluation findings (based on 16 projects having submitted midline literacy test scores for both treatment and control groups), we find that seven projects have shown a statistically significant improvement[121] in literacy compared to their control groups. For projects using comparable tests and units (i.e. 10 out of 16 projects using EGRA), the baseline-to-midline improvement amounted to 16 words per minute on average in treatment groups (15 wpm when adjusted for the number of girls reached). However, the difference in changes in literacy scores from baseline to midline between treatment and control groups is relatively low. For projects which reported a statistically significant improvement in reading fluency compared to their control groups (5 out of these 10 projects using comparable tests and units), the improvement is 8 words per minute over and above the control group (6 wpm when adjusted as above). Finally, for projects that implemented interventions with in-school and out-of-school girls, out-of-school girls' literacy scores showed greater improvement than the scores for in-school girls.

Numeracy

From the EM review of project midline evaluation findings (based on 16 projects having submitted midline numeracy test scores for both treatment and control groups), we find that five projects showed differences in improvements in treatment groups compared to control groups that were statistically significant. For projects implementing interventions with in-school and out-of-school girls, out-of-school girls' numeracy scores increased in treatment groups while dropping in control areas.

Impact on attendance

Based on project midline evaluation findings, attendance improved from baseline to midline. Across 13 projects reporting attendance data, the average improvement is seven percentage points (versus three percentage points in control groups). However, poor quality attendance data makes it difficult to produce reliable findings at midline about improvements in girls' attendance at school. Out of the 13 projects reporting attendance data, data for five projects received an 'inconclusive' quality rating. Anecdotal evidence suggests that attendance rates may go down

[120] DFID (2017) GEC Annual Review Report
[121] That is, significantly different ($p<0.05$) from the improvement observed in control groups.

in some GEC projects as school attendance records become more accurate. In contrast, attendance data in control schools may remain inflated.

Effectiveness of IW projects' activities

From our synthesis of project midline evaluation findings, we find that poverty factors (namely the cost of schooling and domestic responsibilities) are still the primary barriers to girls' education at midline across IW projects. Reducing the cost of education seemed to have led to an increase in attendance, but there is little evidence of effects on learning outcomes as a result at this stage. Evidence shows that school-related barriers have been reduced since baseline through better school facilities and improved pedagogy among teachers by the 18 projects with interventions aimed at tacking these issues. On-the-job training of teachers (mentoring, performance monitoring, and feedback) has been most successful in increasing learning outcomes. Interventions that are associated with barriers caused by girls' aspirations and decision-making ability, such as tutoring clubs and mentoring activities, have had positive impacts on either attendance or learning. Violence has proven a difficult barrier to address. Evidence shows a lessening of in-school violence (in the form of corporal punishment and peer harassment), as well as a general increase in school safety. However, projects have had no conclusive impact on harassment by teachers.

Innovation

IW projects have been innovative in two ways by: (1) in using existing resources and the immediate environment in an innovative manner (e.g. forming partnerships with local organisations, adapting skills training to issues faced by marginalised girls, mobilising communities, using existing media and means of communication); and (2) by providing new products or establishing new systems (implementing new technologies, designing new structures). Working with local organisations and/ or bringing the expertise of specialised organisations has led to positive results, producing better designed interventions. By contrast, the effects of introducing new technologies as a device to enhance educational outcomes has been more limited, mainly because the implementation of a technology has not always sufficiently responded to specific needs and taken account of key contextual factors.

Sustainability

The IW exceeded its midline match funding target of £4.8m to achieve match funding of £6.1m, which represents a 127 percent over-achievement. Sustainability strategies for many projects seem to be primarily based on a continuation of initial stakeholder engagement strategies for project implementation. Few projects were able to demonstrate a sufficient understanding of key drivers and barriers as a basis for developing strategies to sustain the most impactful, effective and critical approaches. At this stage in the life of the programme, with perhaps a few exceptions, the evidence available suggests that many project activities will not be scaled up or sustained by the end of the programme in April 2017.

The above headline findings summarise what we found from the evidence available in Projects' Midline Evaluation Reports and as a result, **what we are able to say in general about the impact and effectiveness of the IW**. Generalised findings like this mask variations and exceptions at the project level, with some projects achieving more than others in terms of their impact and the relative effectiveness of their interventions.

Key findings – To what extent does the IW represent good value for money?

Generally, a majority of IW projects have reached their target numbers of beneficiaries, which includes very diverse groups of girls and communities. At midline, the IW has had a relatively limited impact on literacy and numeracy. Its impact on attendance is inconclusive. While most projects have helped lessen or remove barriers to girls' education, this does not seem to have sufficiently improved learning at midline. A possible reason for this is because these barriers were not always the most critical constraints affecting girls' literacy and numeracy outcomes. Some project interventions have been designed to have a less direct impact than others and as a result may take longer to have an effect on learning outcomes. Projects were generally unable to report on the economy, efficiency or cost-effectiveness of their interventions in their Midline Evaluation Reports. IW projects have levered in a significant amount of match funding, which seems to be focused on helping projects deliver their current activities. However, at this stage, there is little available evidence to suggest than many project activities will be scaled up or sustained by the end of the programme in April 2017.

Projects submitted their Midline Evaluation Reports at the end of the second year of implementation. With one year remaining the evidence is unclear whether the IW will achieve its education outcome targets by the end of the programme. To achieve these targets, the IW will need to demonstrate a significant improvement in the effectiveness, performance and impact over the last 12 months. Furthermore, there is very little available evidence or analysis to indicate that gaps in education outcomes between girls benefiting from projects' activities and other less marginalised girls or boys is closing as a key result of the IW. Projects' M&E frameworks were not set up to systematically measure changes in the gaps in education outcomes between their target beneficiaries and other girls and boys. So, it is unlikely that this type of evidence will be available in projects' endline evaluation reports. It is possible though that the IW will have a greater impact at endline on girls measured at midline because these girls may have been exposed to activities for longer and had more time to benefit from them. This assumes that a key reason why the IW has only had a limited effect at midline is because of the time lag between the delivery of activities and their effects on learning. However, projects' evidence suggests that the most critical barriers are not being addressed in time to have an effect by April 2017, which means the impact of the IW is unlikely to increase in the limited time available.

4 Conclusions

While most projects have helped lessen or remove barriers to girls' education, this has not systematically led to significant improvements in learning for many IW projects at midline.

IW projects have had a relatively low impact on the literacy and numeracy of marginalised girls at midline.

Out of 16 projects having submitted midline literacy and numeracy test scores for both treatment and control groups, only seven projects reported a statistically significant improvement in reading fluency (words per minute) compared to their control groups. Similarly, five projects showed differences in improvements in treatment groups compared to control groups that were statistically significant at midline. Interestingly, IW projects have had a significantly greater impact on literacy and numeracy for out-of-school girls than girls who are in school.

Project interventions are either taking too long to have a direct impact in the time available or projects are not focusing sufficiently on the barriers that have the greatest influence on the learning outcomes of their target girls.

We find that projects that demonstrate an impact on learning are the projects which have chosen to address the most basic and pressing issues faced by girls, parents or teachers. For instance, projects' evidence shows that learning improvements are primarily the result of girls benefiting from an increased volume of instructional hours, with teachers equipped with concrete teaching strategies. Some projects have improved girls' learning outcomes by reducing the practice of corporal punishment and ensuring that teachers provide explanations when students do not understand rather than punishing them – a basic requirement for effective pedagogy.

But generally, based on the review of Project Midline Evaluation Reports, we found little evidence that projects understood the *critical path* between the barriers that girls faced at baseline and the changes that were absolutely necessary to deliver their targeted results at midline. It has proved difficult to see how and why projects' interventions systematically and sequentially addressed the complex hierarchy of problems that their target girls face.

We recognise that across such a diverse portfolio of projects there are many factors (related to both project design and implementation factors) that could potentially explain why projects have been effective or not. Project interventions may be taking too long to have a visible impact on learning outcomes in the time available. For instance, some projects have chosen to address indirect barriers to girls' education, such as a household's lack of available income to afford a girl's schooling, rather than addressing barriers that may have a more direct and immediate impact on girls' learning.

However, projects that have not had an impact at midline may be lacking the focus needed to impact on the biggest education constraints that their target groups face. It is difficult to conclude the extent to which this has influenced the effectiveness of projects without more evidence related to their implementation, but the lack of prioritisation when it comes to choosing which barriers to tackle is a possible contributing factor.

Projects have responded in different ways to complex and at times conflicting design requirements for the IW. It is therefore difficult to compare the effectiveness and impact of projects that have responded to different objectives.

The GEC IW required projects to be innovative, test new approaches, deliver tangible improvements while targeting marginalised girls. Projects have responded through trade-offs between innovating and trying new approaches, the number of girls that they reach and the degree to which the girls targeted are marginalised compared to others in their community.

The DFID Business Case defined marginalised as "those girls of primary and secondary school age (approximate age range of 6-19) who have not been enrolled or have dropped out from school (whether living in slums, remote areas, ethnic minorities, girls with disabilities etc.) or are in danger of doing so". Marginalisation was defined in terms of the education outcomes that DFID wanted the GEC to focus on. At the start of the GEC, DFID decided not to prescribe the type of factors or underlying causes that marginalised girls from education. This was because there was a lack of evidence about what caused girls' marginalisation from education. It was also clear that the factors driving educational marginalisation would vary from one context to another. For this reason, applicants were required to explain how and why the girls they were targeting were marginalised from education.

Under the IW, projects were also tasked to test and pilot new approaches enabling marginalised girls to improve their education outcomes and that if worked well could be replicated and scaled up in sustainable ways. However, similar to SCW projects, IW projects were required to demonstrate tangible improvements in learning results by the end of the programme, across smaller populations, with smaller budgets (up to £2 million). IW projects have responded to this by selecting their target populations in different ways, depending on which imperative(s) they chose to respond to. Projects have made trade-offs between innovating and trying new approaches, the number of girls that they reach and the degree to which the girls targeted are marginalised compared to others in their community.

As a result, the total numbers of beneficiaries across IW projects range from 1,100 beneficiaries (LCSU (Kenya)) to 77,000 beneficiaries (Link (Ethiopia)), with projects focusing on in-school girls, out-of-school girls, teachers or broader community beneficiaries such as parents and community members. Each project has scoped and selected its target groups following a different logic and has responded to different imperatives in different ways. IW projects' target girls include very heterogeneous sub-groups as a result. For instance, projects testing new approaches such as non-formal education with a creative pedagogy for out-of-school girls (Viva (Uganda)) chose to work with a relatively small number of girls, because this approach is resource-intensive and cannot be set up to reach large numbers within a programme like the IW. In contrast, projects that focused on facilitating changes in the educational system through girls, parents, teachers, school directors, government education officials and community members such as Link (Ethiopia) have designed a selection strategy that involves all girls from all schools in selected districts in the country. This suggests that not all of girls are the *most* marginalised or marginalised to the same extent within this group. And overall, girls targeted within each IW project and across IW projects are disadvantaged at varying degrees and across different dimensions.

It is therefore difficult to compare the effectiveness and impact of projects that have responded to different objectives of the IW while assessing performance across the portfolio.

Some projects have chosen to adopt more innovative approaches than others. The total number of girls that projects are targeting, reaching and benefiting vary significantly. Likewise, the extent to which each project's target girls are marginalised varies as do the ways in which they are marginalised.

At this midline stage with one year of implementation remaining, the impact and performance of the IW is judged by the impact it has had on girls' learning and attendance outcomes. However, the different ways in which IW projects have responded to the challenge makes it difficult for DFID and the FM to compare performance across the portfolio and assess their relative value for money – it depends on DFID's desired balance between imperatives including short-term learning impacts versus sustainability versus innovation versus reaching the *most* marginalised.

Projects who targeted smaller numbers of specific groups of girls had a better understanding of those groups and as a result have been more effective that took a general approach to targeting.

The evidence suggests that projects who focused on smaller numbers of specific groups of girls had a better understanding of those groups and as a result have been more effective. The projects who generally targeted larger numbers of girls with preconceived design models and did not know as much about their target population seem to have been less effective.

Projects targeting all the girls who live in a community, because all the girls from the area are considered to be marginalised girls, are not necessarily focusing on the *most* marginalised girls within this community. Projects using a more detailed range of eligibility criteria to select girls in communities, schools or households have been more likely to develop intervention designs that address the specific needs of the girls they have chosen to work with. Put simply, when an intervention specifically targets the needs of specific groups of girls it has been designed to help, these girls are more likely to receive and benefit from the type of support they need.

This observation is especially true for projects that are working with girls with disabilities such as LCDK (Kenya) or LCSU (Uganda). These projects build on their significant experience and expertise in working with specific populations such as disabled children. As a result, they have been more effective in focusing their interventions on the specific needs of the girls they had set up to support, compared to projects that typically work with children regardless of their age, gender or disability status.

This level of heterogeneity among IW target populations means that some projects have effectively tested new approaches with small and targeted groups of marginalised girls, while other projects attempted to reach out to a

larger number of girls, sometimes through activities that had not yet been tested in terms of their effectiveness at scale. Some projects have been effective while reaching larger number of girls, but we find that projects working with smaller number of girls have been more successful at improving learning outcomes across the IW, possibly because their interventions were better tailored to the specific groups they were targeting.

We find that the IW as a funding mechanism was better suited to fund organisations that already had expertise and experience of: working with certain groups of girls (e.g. projects focusing on girls with disabilities); implementing specific innovative interventions or processes (e.g. projects using technology in the classroom); working in specific areas (e.g. projects using networks of local organisations); and/ or working with an intervention model they knew how to adapt to new or changing conditions. Organisations that tried to generally replicate and apply an existing model with minimal adaptations in an area they had not worked in previously, with girls whose needs they did not fully understand or in a context in which they could not rely on existing relationships with various stakeholders have been less successful.

Projects have struggled with the consequences of targeting girls over boys and more generally targeting the *most* marginalised groups within already disadvantaged populations.

Key barriers to education such as poverty, poor teaching, poor school facilities and governance affect both boys and girls. The resentment from boys observed by many IW projects may partly be explained by boys being unwilling to give up gendered privileges, but it might also reflect that boys have similar needs for support as girls.

Some communities and children have expressed resentment and frustration to projects, as girls and boys were receiving unequal benefits at school for things like after-school clubs or snacks. After complaints that girls' education was being improved at the expense of boys' education, some projects have modified their intervention designs to benefit boys as well as girls in contexts where both sexes are equally marginalised.

Some interventions have had unexpected negative effects in treatment communities. The most prevalent of these unexpected effects were resentment or discrimination against children eligible for receiving benefits from the project's intervention. For example, some in-school girls in one project area temporarily dropped out of school in order to be eligible for back-to-school kits. In another project, girls that reported bad behaviour by boys to school officials were harassed by the punished boys on their way home, which resulted in girls fearing even more reporting abuse in the future.

This raises an important question about whether the GEC should have targeted communities in which gender inequalities are more pronounced, or whether it should have focused on improving education opportunities in marginalised communities more generally, for both girls and boys.

The fact that many projects were surprised by the resentment from boys and other non-benefitting girls suggests that gender and marginalisation dynamics were not fully diagnosed, unpacked or analysed at the design stage.

We found that across the IW, powerful social norms and structures that limit girls' opportunities persist in most target communities. In some communities, preparing a girl for marriage is still considered the best investment in her future by many parents, given the limited economic opportunities available in their communities. Menstruation still prevents many girls from attending school, due to a lack of sanitary supplies as well as the social stigma attached to it. These gendered barriers need to be addressed so that girls are able to participate in education and society more largely on equal terms with boys. But changing such deeply engrained social inequalities may require a deliberate and quite specific effort.

It cannot be assumed that all education barriers that girls face are gendered problems. Structural barriers, such as a lack of teachers or a lack of schools affect both boys and girls. Although a lack of education due to these types of factors may have a greater negative impact on girls than boys in later life, the gender implications of addressing these types of barriers by only supporting girls' education need to be carefully considered at the project design stage. Several projects reported tensions arising around activities designed to only benefit girls, which meant boys continuing to be disadvantaged in terms of accessing a quality education. This raises important ethical and equity issues from the perspective of boys as well as potentially making gender relations worse. Several projects found that they had to expand their beneficiary groups to include boys as well as girls.

It is not evident that projects have conducted gender analysis of the pathways through which specific types of barriers have stronger effects on girls' education compared to boys' education. The definition of marginalisation was therefore rarely a gendered definition across IW projects, especially as some projects' eligibility criteria have led to some girls receiving support while other, less marginalised girls were left out of the project's scope.

Furthermore, very few projects reported changes in gender disparity between boys and girls in terms of their learning or attendance outcomes. Projects have not been able to report or demonstrate an in-depth understanding of how different factors affect girls' learning compared to boys' learning and what implications these have for their progression through school. As a result, it is not clear what type of interventions are most effective in improving girls' learning outcomes compared to boys or improving the quality of education for both boys and girls.

Projects that fully understand and are sensitive to the local context have proven to be more effective and impactful than those that have not been able to sufficiently tailor their designs.

Projects that knew their local context and understood what would work, how and why were able to have a greater effect on the barriers they set out to address. Some projects seeking to adapt models to a new local context sometimes struggled to tailor them to the social, economic and institutional needs of the education systems in which they were operating.

What works in improving girls' access to education depends on the type of population (e.g. nomadic or settled), the environmental factors that communities are grappling with (e.g. conflict, drought, or disease), the strength of national and local governance around education (e.g. strong, effective or weak structures), the social norms and discourse around girls going to school and the willingness of relevant stakeholders and gatekeepers to see girls learning in their communities (e.g. district officials, village elders, religious leaders, mothers, etc.).

Many IW projects have used types of interventions or design models that have been used before in another country or elsewhere in the same country. Using evidence and lessons learned from what has worked before is a good starting point when designing projects. However, several projects struggled to make a difference to their girls' education, partly because they had not fully understood and adapted their designs to their context.

For instance, Mercy Corps' (Nepal) attempt to improve access to a lighting source in project communities did not work as expected, due to a lack of understanding of households' needs. Camfed (Zambia), which has had mixed results to date from teacher training interventions, reported that adapting its model to existing school structures in Zambia had proven difficult – the main reason being that the difficulties faced by teachers in Zambian schools are context-specific, and widely different from those experienced in Colombian schools, where the model originates. This highlights the importance of rigorous needs assessments conducted at the design stage that carefully consider the complex relationships between need, demand, incentives and behaviours, and provide an opportunity for projects to reflect on how to best adapt their theoretical designs to the realities they are facing in their intervention areas. Interventions cannot be replicated effectively without a prior and in-depth understanding of the schooling context in which projects are intervening.

Project designs need to be grounded in an in-depth understanding of the local context at institutional and social levels.

Other projects have considered contextual factors and shown positive impacts on learning by working with education authorities, such as Viva's (Uganda) close work and engagement with a range of stakeholders in education in Uganda. Similarly, engagement with different stakeholders in the community such as having parents conduct visits to households and outreach activities being led by community members have shown promising effects on changing attitudes towards girls' education (Red (South Sudan)).

Finally, a few projects have successfully brought down the cost of schooling by facilitating access to scholarships from the government or from other organisations, demonstrating the importance of engaging with other actors and stakeholders working in the area.

There is little evidence that IW projects have joined up and coordinated with other relevant actors with the education sector and in other sectors – those that have proved more effective.

There is little evidence that projects have mapped the landscapes in which they work to identify which actors they could coordinate and collaborate with.

The GEC is an education programme. Yet, many of the barriers to girls' education cut across other sectors, in particular: water, sanitation, health, food security, livelihoods, climate change, employment, vocational training, child protection, violence against women and girls and security. Projects that set out to improve girls' learning through different entry points by joining up with a range of different actors have proven more successful.

The tactical nature of this type of approach involving multiple types of interventions has enabled these projects to tackle complex problems effectively. Projects that were less tactical in coordinating with other actors seemed to be less successful. With limited time and resources, it is unrealistic for small-scale IW projects to expect to impact on all of the barriers to education that marginalised girls face. Particularly those barriers that are structural (e.g. fundamentally important to improving the quality of education for girls, such as a lack of teachers, schools or classroom facilities) and are difficult to improve and take a substantial amount of time and resources to change.

Some projects have adapted to changes in their operational environments, but many have struggled to respond to significant and rapid changes in their context.

In order to overcome unexpected roadblocks to implementation, projects had to adjust their interventions to accommodate these factors, but not all projects have done so, suggesting that projects' capacity to flexibly adapt their interventions to a changing context has varied.

Between baseline and midline, some projects identified barriers present in their target communities that interventions were not addressing between baseline and midline. Many projects though experienced various delays due to changing political and economic environments that led to institutional restructuring, inflation-driven rises in the costs of schooling, reduction in the length of the school period, and laws and policies that affected girls' education both directly and indirectly. Some projects also found that the implementation of their intervention was affected by unforeseeable crises associated with violence and environmental disasters. Projects that have effectively adapted their activities have used and acted on the findings from their baseline and midline research. They generally took a holistic approach to addressing the barriers to girls' education to *test* which parts of their intervention design were more suited to delivering results in the context they operate in and appropriately *deciding* which parts to switch off or adapt.

The IW has demonstrated little radical innovation with limited effects to date. Other types of innovation have been more incremental in nature and focused on different types of delivery partnerships.

As with adaptive programming, innovation requires a programme management framework that is able to accommodate room for failure and a project management environment capable of fostering and supporting the evolution of ideas in an iterative and adaptive way.

The IW has demonstrated little radical innovation, largely through technology, which has had limited effects to date. Other types of innovation have been more incremental in nature and focused on different types of partnerships for delivering project activities. The IW is managed through the same type of programme management framework as the SCW, which is perhaps one of the reasons why there are so many similarities between the two windows.

A more explicitly iterative approach to programme management would be needed to enable the programme and IW projects to be truly adaptive and highly responsive to changes that some of the projects needed to make.

The steps between the IW's objectives, research, project design and implementation phases would be more iterative and shaped more by the evidence-based results of each previous phase. This approach would require greater flexibility built in at the activity and output level of a project's performance management framework. It would also require a different approach to monitoring and evaluation – one in which evidence was gathered more rapidly and used as an integral part of project management decision-making in real-time. In the context of the current GEC approach to programme management, the limited evidence of project innovation and adaptation is perhaps unsurprising.

Projects' sustainability strategies seem to be progressing too late and are overly reliant on untested assumptions about the capacity of groups and organisations to sustain key activities.

There is little reported evidence to suggest that by the end of the programme in April 2017, many project activities will be ready to be scaled up or sustained.

IW projects have effectively levered in additional investment. However, on the whole this additional investment seems to be committed to delivering current activities and there is little to suggest that these commitments will be maintained beyond the end of the programme.

The IW has exceeded its match funding target as a result of projects levering in additional cash and in-kind resources from local communities, implementing partners and their own organisations. Projects have assembled a wide range of implementing partners and work through networks and forums at local, provincial and national levels

to share information and lessons learned. Match funding and the resources levered in as a result of projects' stakeholder and implementation strategies seem to be focused mainly on delivering results within the projects' lifetime.

Some of these networks are intended to advocate for policy change to support improvements in girls' education outcomes. They include government representation at different levels of the education sectors in each country. However, projects found that it takes a long time to change policy and the behaviour of government ministries in particular. Government engagement has proved to be a frustrating process for projects, particularly when the sustainability of project activities or benefits is dependent on government funding or government adopting their approaches.

There is strong of evidence suggesting projects know how to engage with government, local communities and schools.

However, it is not clear that projects have effective succession plans in place that set out how to influence and change the attitudes, capacity and behaviour of key people in government to get tangible commitments to sustain project activities. In the absence of government support, sustainability strategies are dependent on schools and local community groups to continue supporting and delivering project activities after the end of the project. There is though little explanation about how they would do this and why they would do this once the formal or informal support infrastructure provided by the project and GEC funding has stopped completely or reduced significantly.

Girls' marginalisation is context-specific. This means that projects need to demonstrate that they have horizontally and vertically mapped the landscapes in which they work within the education sector and across other relevant sectors, and at different governance levels. It is evident that projects have done this in parts and done this well, but not comprehensively or systematically for the express purpose of supporting the development and delivery of an effective sustainability strategy.

An important part of a sustainability strategy is the commercial viability or business case supporting decisions by local communities, schools, government and non-government actors to take on additional roles and responsibilities when typically they have not enough time or resources.

The value for money sections in the projects' Midline Evaluation Reports were generally poor. This is an opportunity lost on the part of the projects to understand which interventions are more cost-effective than others. At this stage of implementation it is also critical to convincing key stakeholder audiences that the benefits outweigh the costs when committing scarce resources to sustaining activities and approaches that are new to them and involve diverting budgets from other activities.

It is clear that projects are at varying stages of developing, kick-starting and progressing their sustainability plans. For most projects this process seems to be progressing too late in the lifecycle of the projects, with less than one year remaining to the end of the programme in 2017. Sustainability needs to be built into the project design at the very start and proactively progressed from the outset. Generally across the IW, this does not appear to have happened for many projects.

Rigorous quasi-experimental evaluations require expert resources and relatively stable conditions that are not always available on the ground.

Despite the relative success of conducting a large-scale data collection exercise across 19 projects operating in 12 different countries, many IW projects have struggled to comply with the GEC's rigorous evaluation requirements.

Projects faced issues with attrition, inaccurate learning assessment scores, poor management of cohort re-contacting protocols, matching of cohort observations across baseline and midline, the comparability of treatment and control groups, and the usability of school register data.

At midline, seven projects struggled to match midline observations with the data collected at baseline. This was largely due to inconsistent coding or miscoding of identifiers for girls and their households, failure to collect data on household location and contact information at baseline, or baseline identifiers being held by an external evaluator that no longer worked on the project. This caused delays in fieldwork, data cleaning and processing because enumerators struggled to re-contact the right girls and households. It also made the merging of baseline and midline datasets very difficult. Many projects have struggled to manage their external evaluators and hold them to account which had a negative effect on the quality of the projects' data and their Project Midline Evaluation Reports.

A key learning point is that the GEC Evaluation Strategy overestimated the *capacity* of projects and their local evaluators to deliver such complex and rigorous evaluation designs within often messy and shifting contexts, tight timelines, and with limited research expertise available on the ground. As a result, we have not been able to harmonise and analyse the data collected by projects to the extent planned.

Projects' external evaluators struggled to produce good quality qualitative analysis and evidence to identify which interventions were most effective in enabling girls to go to school, attend school and learn.

The most useful and meaningful learning about what works emerges at the project level and requires a clear understanding of how intervention mechanisms work, their specific theories of change and their effects on girls' education and learning pathways.

Many projects were unable to evidence or explain in their Project Midline Evaluation Reports how different types of interventions worked to improve girls' learning outcomes and which interventions or combination of interventions proved most successful and why. The iterative steps from delivering activities to achieving small incremental and intermediate changes that ultimately contribute to improvements in learning outcomes were not clear in projects' reports – particularly for those projects whose interventions depended on a key assumption that an improvement in enrolment and attendance alone would automatically lead to improved learning outcomes because girls were able to spend more time in school being taught.

This significantly compromises the potential learning from the projects' evaluation reports, particularly with regards to projects being able to identify key changes and improvements in activities that need to be made. This also constrained projects in being able to undertake cost-effectiveness analysis because reliable evidence of the relative effectiveness of different types of interventions was not available. Cost-effectiveness analysis will also be difficult because of the heterogeneity of the groups targeted by projects in terms of their levels of marginalisation and the varying levels of resources needed to reach them and have an effect on their education outcomes. In this respect, it is important that projects are able to describe, measure and evidence how and to what extent their target girls are marginalised compared to other girls and boys to identify which type of interventions are most effective and most cost-effective.

5 Recommendations

The GEC programme ends in April 2017, with individual projects' contracts ending at various points between early 2017 and April 2017. DFID and the FM are currently in the process of commissioning the next phase of the GEC. All of the current GEC projects are eligible to submit proposals for the new GEC Transitions Window, which is one of two funding windows that will make up the next phase of the GEC. The other window is called 'Leave No Girl Behind', and focuses on those girls who are the most marginalised.

The following recommendations have been developed with a view to specifically informing the next phase of the GEC. These recommendations are aimed at DFID. However, the actions required to deliver them involve DFID, the FM, grantees and the EM.

1. **Project designs should be focused more directly on delivering the required results.** A lack of a focus on problems that are critical to improving girls' learning outcomes is a key reason why IW projects have not been as effective as expected. Projects need to better demonstrate and describe how each type of intervention contributes to delivering improvements in girls' learning in time to deliver their agreed targets.

   Key Actions: At the design stage, with the support of the FM, projects should be required to describe in more detail the critical path between activities, intermediate outcomes and learning outcomes. This should include a clear explanation of which barriers will be affected by which project intervention or combination of interventions at each step to explain how and why this will specifically lead to improvements in girls' learning.

2. **Context analysis should be an integral part of the design process and M&E, particularly when adapting designs that have been tried and tested from elsewhere.** Marginalisation is very context-specific. Contextual factors have a significant effect on projects' success. They need to be tested, tracked and evaluated as an integral part throughout the project lifecycle.

   Key Actions: Before baseline research starts, key assumptions about the project's context should be rapidly appraised and evidenced. This should include:

   - *political economy analysis* of the education system at national, provincial and local levels; and
   - *contextual analysis* of relevant factors outside the control that are most likely to affect the success of the project covering political, environmental, social and economic factors in particular.

   The baseline findings from this analysis should form the basis for ongoing project M&E and performance reporting.

3. **Projects need to coordinate much more with other programmes and actors working in IW project environments.** The factors marginalising girls from education are multi-faceted cutting across different sectors and different parts of the education system. The most effective way of addressing such a wide range of problems is to join up with other actors who are able to contribute to improving girls' learning outcomes.

   Key Actions: At the design stage, projects should be required to map out the strategic actors and identify which other government or non-government actors are planning or currently delivering activities that could help address the barriers that their target girls and communities face. This should form the basis for designing projects in strategic collaboration with the GEC and other relevant initiatives and programmes.

4. **Gender analysis and gender action planning should be at the heart of GEC project design, delivery, M&E and reporting processes.** It is critical to the success of GEC projects that they are able to identify and track the extent to which girls are disadvantaged from achieving education outcomes compared to boys and how.

   Key Actions: From the start all projects should systematically gather primary and secondary evidence of gender parity in enrolment, attendance, retention and learning outcomes across grades, school phases at national, regional and local levels. Problem analysis, project design processes and targeting strategies should be driven by clear evidence of girls being significantly disadvantaged compared to boys – this should be supported by gender analysis of marginalisation factors affecting girls and boys in target areas to inform decisions about the types of interventions that projects use and the ways in which they will work to

benefit girls who are marginalised from achieving an equitable access to a quality education. Boys as well as girls should continue to be the focus of project M&E – this should include testing the learning outcomes of both boys and girls as an integral part of the GEC Evaluation Strategy and projects' M&E frameworks.

5. **If DFID wants projects to take truly innovative and adaptive approaches then this needs to be supported by a different type of programme management approach.** Innovation and adaptation requires a programme management approach that incentivises, facilitates and allows projects to iteratively test, learn, adapt, evolve and sometimes fail.

   Key Actions: If DFID wants projects that are able to truly innovate and adapt quickly and effectively, then different programme management mechanisms are needed – generally, these would need to be more iterative in the way project designs evolve, more flexible in the way that they are managed, particularly with regards to the delivery of outputs and intermediate outcomes.

6. **DFID needs to decide and set out what type of outcomes it can reasonably expect projects to deliver by the end of their lifetime.** From the very start applicants and grantees need to be made explicitly aware of the primary focus and objectives of their projects – in particular priorities between trade-offs such as delivering impacts on learning in a relatively short amount of time versus more sustainable or innovative solutions that involve more risk.

   Key Actions: From the start of the programme, DFID and the FM should make the strategic priorities (and acceptable trade-offs between them) explicitly clear, in particular in the GEC results framework/ logframe that all projects are required to deliver.

7. **Sustainability should be a central focus for the next phase of the GEC and structured to deliver effective sustainability strategies from the start.** Projects need to plan from the start who they will engage with and why, and set out what actions are needed to facilitate stakeholder buy-in and commitment to sustaining activities critical to the sustaining of benefits for projects' target girls.

   Key Actions: Sustainability strategies should include:

   - *A government engagement plan* – setting out plans for engaging government at a national policy level and administratively at regional /provincial and local levels. From the outset, these plans should clearly set out the roles and responsibilities envisaged for government and form the basis for ongoing negotiation and collaboration.
   - *A community engagement plan* – setting out plans for engaging different parts of the community, its roles and responsibilities for continuing key activities after the end of the project. This should include an assessment of the key drivers and barriers to continued community engagement and capacities that need to be developed throughout the life of the project.
   - *A stakeholder coordination plan (including government, DFID country offices and other donors)* – setting out plans for coordinating with other programmes and initiatives both within the education sector and across other sectors (e.g. WaSH, livelihoods, health, child protection etc.) relevant to girls' education.
   - *A commercial sustainability plan* – this should set out key input costs against each of the project's outputs/ types of intervention. This should enable projects to measure their key output unit costs as a starting point to assessing and demonstrating to stakeholders the commercial viability of their sustainability plans.
   - *Match funding and leverage plans* – this should set out the project's plan for influencing stakeholders before and after the project has started. There should be a clear distinction between match funding and leverage:
     - *Match funding* should be defined as funding attracted *before* the start of the project from partners and stakeholders who have bought into the project concept and want to financially support the delivery process; and
     - *Leverage* should be defined as additional resources that are committed by stakeholders because of the project's activities and influence during delivery – this should act as a better indicator of stakeholder investments in sustaining activities beyond the end of the project.

8. **A counterfactual approach to impact evaluation adds value to programme learning and accountability, but DFID and the FM should reconsider how it is carried out and by whom.** Designing and delivering a counterfactual approach to impact evaluation has involved a large investment of time and resources by DFID, the FM, EM and projects. The process has faced significant challenges as a result of: a lack of technical capacity among projects, their external evaluators and local research organisations; adverse environmental conditions; and changes in project designs and targeting. Yet, impact evaluation at the project-level appears to be the most appropriate unit of analysis due to the variety of projects' contexts, strategies and intervention types. So, a potentially more effective and better VfM alternative could be for a single agency to carry out all project-level *impact* evaluations, while evaluations commissioned by projects focus on assessing the *processes, performance and effectiveness* of their interventions.

9. **A project M&E capacity building plan should be developed from the start.** This phase of the GEC has demonstrated that there are beneficial spillover effects from building the internal M&E capacity of projects.

   Key Actions: From the start, the FM conducts a rapid needs assessment with regards to projects' internal capacity to support the scale and level of research, monitoring and evaluation required – this should form the basis of a comprehensive capacity building plan to strengthen projects' ability to specify, commission, manage and conduct M&E.

10. **Projects' M&E frameworks need to deliver robust evidence of which types of interventions are most effective in delivering girls' learning outcomes.** The level of rigour required to implement counterfactual approaches to impact evaluation in these contexts requires projects and their external evaluators to have high levels of expertise and experience to deliver them effectively. This has proved a challenge. Projects have also struggled to produce good quality qualitative analysis to explain how and why their projects work and which types of intervention work best to improve girls' learning outcomes. For this reason we have recommended above that DFID and the FM consider an alternative approach where a single agency undertakes the impact evaluation (and learning tests) for all projects across the IW. While projects should not be prevented from conducting learning tests, we recommend that projects focus on a theory-based approach to evaluation to improve the evidence base about what works in educating girls in different ways and different contexts. This approach would allow the FM and projects to focus their resources on conducting a more systematic assessment of projects' theories of change while enabling a rigorous, efficient and consistent approach to evaluating impact across the IW.

    Key Actions: The following changes to M&E frameworks could help projects better measure what works:

    - the FM supporting projects to take a theory-based evaluation approach with a stronger focus on *qualitative research and analysis* that will help projects better identify what works and assess the relative effectiveness of different types of interventions, for different target groups across a wide variety of contexts;
    - introducing *intermediate outcome targets* would enable the FM and projects to track and measure the contribution of different types of interventions towards improvements in girls' learning outcomes; and
    - a greater emphasis on *process evaluation* would help projects distinguish between design or implementation success/ failure when evaluating their effectiveness and impact.